



AccuStandard®

Table of Contents

Organic Single Analytes, Select Mixtures and Methods	1-262
Persistent Organic Pollutants (POP)	3-66
Polychlorinated biphenyls (PCBs) and Metabolites	3-18
Halogenated Aromatics (other than PCBs & PBDEs)	19-20
Dibenzo-p-dioxins	21-22
Dibenzofurans	23
Polybrominated Diphenyl Ethers (PBDEs) and Metabolites, other Brominated Flame Retardants (BFRs), Organophosphate FRs (PFRs)	26-38
Polynuclear Aromatic Hydrocarbons (PAHs) and Derivatives	39-43
Nitrogen Containing Compounds	44
Pesticides and Herbicides 125+ NEW, Neonicotinoids	45-66
Volatiles (VOCs)	67-70
Analytes by Functional Group	71-80
Alcohols	71
Aldehydes and Derivatives	71-72
Ketones and Derivatives	72
Phenols	73-74
Amines, Anilines and other Amino Compounds	74-76
Ethers	77
Halo Ethers	77
Haloacetic Acids	77
Phthalates	78-80
Analytes by Application	81-111
Explosives and Firearm Discharge	82-85
Fuels & Hydrocarbons (Petrochemical section)	307-310
Plastic Additives and Bisphenol Analogs, Imidazoles	86-92
Food Analytes (Lipids, Vitamins and Preservatives)	92-97
Fatty Acid Methyl and Ethyl Esters (FAMES, FAEEs)	96-97
Allergens (Personal Care Products)	98-103
Dyes	104-106
Perfluorinated Acids and Salts (PFOA, PFOS)	107
Odor Standards	107
Irritant Standards	107
Refrigerants	108
Qualitative Analysis Kits	109-111
EPA Methods	114-240
Individual Analytes from EPA Methods	114-124
CLP (Contract Laboratory Program)	125-139
500 Series - For Drinking Water	141-168
600 Series - For Waste Water	169-180
1300 Series - TCLP (Toxicity Characteristic Leaching Procedure)	181-182
1600 Series - PBDEs, Pesticides, Pharmaceutical Waste Discharge & PCBs	183-194
8000 Series - For Solid Waste, Appendix IX and Explosives	195-240
Methods other than EPA	241-260
Regional Methods - Canada, Europe, Asia, USA States, Municipalities	241-256
Biocides - EU Directive 98/8/EC (BPD)	257-260
Halobenzoquinones, ASTM 7065-6, 7485 Nonylphenols, Alkyl-Phenol-Metabolites	261
USP 467, F-List	262

New & Updated Products in RED

Introduction

About AccuStandard Quality	iii
Custom Formulations	iv
Quality System	v
Certificate of Analysis	vi
Custom Synthesis	viii

Custom Services

- Synthesis
- Formulations
- Packaging
- Bulk Quantity Requirements

PRINTED ON
RECYCLED PAPER



About the Cover

Alchemist in his Workshop

David Teniers II (Antwerp 1610-1690)

Courtesy of the Chemical Heritage Foundation Collections, and Roy Eddleman, Photograph by Will Brown

This painting is a depiction of an alchemist working at the bellows in his cluttered laboratory. In this work, the mixture of the magical aspects of alchemy (the hanging animal) mix with the more practical aspects of chemistry (the many distillation units near the hearth). Although alchemists were often looked upon as "crackpots" or charlatans, many of their experiments and theories led to modern chemistry.



Petrochemical	263-324
ASTM Listing and Cross References	264-267
Physical Properties	266-267
Sulfur Standards	268-270
PIANO	271
Detailed Hydrocarbon Analysis and SIM DIS	272
ASTM Reference Standards	273-301
Diisocyanates	296
UOP Standards	302
Miscellaneous - Skinner List, Fire Debris	303
BioFuels	304-306
TPH & Fuels & Hydrocarbons	307-310
Brownfield Regulation and ISO/DIS 9337	310
LUFT/LUST (UST) Methods - State Specific, GRH, DRH - TPH	311-324
Oil, Grease & TPH - EPA Methods 1664, 413.2/418.1 and 8440	324
Wear Metals (Organometallics) and Lubricating Oils	375-382

Inorganic	325-385
Single Element	327-340
ICP	327-330
ICP/MS	331-332
AA	333
Matrix Modifiers / GFAA Multi's	334
Ion Chromatography (includes Multi's)	335-338
Wet Chemicals	339-340
TPH, Oil and Grease	341
ICP Multi-Element	343-370
QC, SDWA, TCLP, MISA, CLP, SW-846, EPA 200.7 Series, EPA 6010 Series	344-357
Alternate Source (Merck, Agilent/Varian, Perkin Elmer, Horiba/Jobin Yvon, Teledyne)	358-369
Miscellaneous Applications - EU and ASTM Methods	370
ICP/MS Multi-Element	371-374
Organometallics (Wear Metals)	375-379
Lubricating Oils	380-382
ASTM Methods	379, 383
Solid Matrix	384-385

Reference Information	386-423
Periodic Table of Elements	386
Solvent Miscibility Table, Abbreviations, Unit Conversions General Constants	387
Label, Safety, Storage and Packaging	388
Indices	389-423
CAS Number	389-393
Organic Analyte	394-401
Catalog Number	402-422
Custom Quotation Form	Inside Back
Contact / Ordering Information	Back

New Products in this Catalog

- Phthalates **17 NEW**
- Phosphate Flame Retardants (PFRs)
- PBDE Congeners (209)
- PBDE Metabolites **25 NEW**
- PBCDE Metabolites
- Biocides (EU Directive)
- Pesticides **Over 125 NEW**
- Neonicotinoids
- Plastic Additives **20 NEW**
- Bisphenol Analogs
- Halobenzoquinones
- Imidazoles
- EN14105, EN15721 Biofuels



Visit our
website for
the latest
New
Products

www.accustandard.com



3 Year Minimum Shelf Life on
Single Element ICP, ICP/MS and AA

Officers



Mike Bolgar
CEO



Amy Harvey
President



Susan Meronek
General Manager



Matt Bolgar
VP



Jack Hubball
Technical Director

Technical Service



Eric D.
Manager, New Product
Development



Bob U.
Organic Technical
Quotation Specialist



Sheila M.
Organic Technical
Quotation Specialist



Johanna G.
Organic Technical
Quotation Specialist



Lee M.
Organic Technical
Quotation Specialist



Dolly S.
Organic Technical
Quotation Specialist



Tom A.
Inorganic
Product Manager



Danielle L.
Inorganic Technical
Quotation Specialist



Carol W.
Office Manager



Susan C.
Customer Service Rep.



Mike E.
Customer Service Rep.



Patty S.
Customer Service Rep.



Lisa L.
Customer Service Rep.



Rosemary N.
Customer Service Rep.



Jackie B.
Customer Service Rep.



About Us

AccuStandard, founded in 1986, is a leading manufacturer of Certified Reference Materials (CRMs). The company started in a business incubator co-sponsored by Yale University and The City of New Haven at the former site of Olin Chemical Company in New Haven, Connecticut, USA. Outgrowing that facility, the company moved across town in 1998 into a fully modernized facility of 37,000 square feet of laboratories, office and storage space. AccuStandard offers a comprehensive selection of organic, inorganic and petroleum reference standards for chemical analysis, serving a global market.

AccuStandard ships products to over 130 countries and maintains a distributor network in 85 of those countries. Since AccuStandard's inception the product line has grown to include over 12,000 Reference Standard products and twice that number of special formulations which have been developed for specific customer needs. Standards include those for EPA Methods, Pesticide Residue Screening, Flame Retardants, Biofuels, Plastic Additives, Dyes, Explosives, UOP and ASTM Methods and up-graded products for PIANO and Physical Property analyses.

The Company is renowned for its recognition and speedy introduction of standards to the market place. The Company's unparalleled Synthesis Department provides important and unique products and product lines, including synthesis of all 209 PCB and PBDE congeners, as well as many halogenated dioxins and dibenzofurans, PAHs and pesticides.

Among the more recent introductions are the hydroxy and methoxy PBDE congeners as well as mixed bromo/chloro hydroxy and methoxy diphenyl ethers, fluorinated PBDE congeners (used as internal standards), organophosphate flame retardants, biofuels, plastic additives (AccuStandard authored a CRC Press Handbook), EPA Method 535 pesticide derivatives and previously unavailable explosives.

AccuStandard's quality system is certified to ISO 9001 and is accredited to ISO Guide 34 and ISO/IEC 17025 as a Reference Material Producer for the manufacture of Certified Reference Materials (CRMs). AccuStandard owes its success in large part to the excellence, loyalty and dedication of its staff. We look forward to serving our customers for many years to come.

AccuStandard, At Your Service



Synthesis



Organic and Inorganic Production



*Organic and Inorganic
Quality Control*



Assembly / Shipping

Quality Control

Organic

- GC/MS
- GC-FID
- GE-ECD
- LC/MS/MS
- HPLC
- Sulfur analyzer

Dedicated scientists responsible for ensuring our products meet the high quality demands of our wide spectrum of clients.

Our years of experience are backed with state-of-the-art analytical instrumentation



Inorganic

- ICP-MS
- ICP
- Ion Chromatography



**You Set the Standards
We make them!®**

Custom Formulations

Fast Turnaround

**25-Plus Years Custom
Formulation Experience**

**Custom Standards are a cost
and time saving alternative**



Custom QC options

1. Gravimetric/Volumetric Certification:

Each purity is measured gravimetrically and QC verified instrumentally (where applicable).

Every component in the Standard will be within $\pm 0.5\%$ of the requested value unless otherwise stated on the Certificate of Analysis.

The solutions are diluted to volume using Class A glassware. A COA accompanies each Standard and documents the gravimetric values used.

2. Full Quantitative Certification:

This QA/QC method includes extended GC, GC/MS or LC analysis using both internal calibration standards plus statistical analysis.



Private Labeling / OEM

**Manufactured and Tested to meet your
specifications**



Auto Filling/Sealing Machine: Ampule sizes 0.2 mL - 20 mL / Quantities 500 to 500K

Contact Technical Service for inquiries

Quality System

ISO Guide 34 • ISO/IEC 17025 • ISO 9001

AccuStandard has a broad range of products including all 209 **PCBs**, all 209 **PBDEs** and **sulfurs** within the scope of accreditation for ISO Guide 34 and 17025. Since AccuStandard serves a diverse group of customers and industries with a broad-spectrum of quality standards, compliance with the QC requirements set by our accreditations ensures that AccuStandard products are manufactured and tested to the highest industry standards.

Our customers can be confident that our products are acceptable for use in multiple applications and across international borders. This emphasis on documented quality applies to both the organic and inorganic product lines (see below).



SCOPE OF ACCREDITATION TO ISO GUIDE 34:2000

Certified Reference Material (CRM)

Class or Type of Reference Materials Produced

- PCBs
- Pesticides
- Explosives
- VOCs
- Semivolatiles
- Metals
- Anions / Cations
- Sulfur
- PBDEs



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

Chemical Reference Standards (Neat or Solution Form)

- VOCs
- SVOCs
- PCBs
- Pesticides
- Explosives
- Sulfur
- PBDEs
- Anions and Cations
- Metals



CERTIFICATE OF REGISTRATION TO ISO 9001:2008

Quality Management System

Scope of Registration

Design, Development, Production and Distribution of Inorganic and Organic Neat and Synthetic Chemical Reference Materials Formulated to USEPA, ASTM, Internal, and Custom Designed Specifications.

AccuStandard is accredited to ISO Guide 34:2009, ISO/IEC 17025:2005 and certified to ISO 9001:2008.

Visit our website at for a copy of the latest Certificates.

Certificate of Analysis

Sample: Multi-component Organic COA

125 Market Street
New Haven, CT 06513
USA

AccuStandard®, Inc.

Tel (203) 786-5290
Fax (203) 786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: DRH-007S
Description: Proposed DEP(MA) - Aliphatic Hydrocarbons
Lot: 212121171
Solvent: Hexane (50%)
Dichloromethane (50%)
Hazards: **HIGHLY FLAMMABLE** - Refer to SDS for safety info

Date Certified: Dec 14, 2012
Expiration: Dec 14, 2022
Sample Size: 1 mL
Storage Condition: Ambient

☒ Included on ISO/IEC 17025 Scope of Accreditation
☒ Included on ISO Guide 34 Scope of Accreditation


Danger 2

Component	CAS #	Purity % (GC/MS)	Prepared Concentration ¹ (µg/mL)	Certified Analyte Concentration ² (µg/mL)
Nonane	111-84-2	99.8	1001	999
Decane	124-18-5	100.0	1001	1001
Dodecane	112-40-3	98.3	1001	984
n-Tetradecane	629-59-4	100.0	1001	1001
Hexadecane	544-76-3	99.4	1002	996
n-Octadecane	593-45-3	100.0	1001	1001
n-Nonadecane	629-92-5	99.5	1002	997
Eicosane	112-95-8	99.8	1001	999
Docosane	629-97-0	99.1	1002	993
n-Tetracosane	646-31-1	98.9	1002	991
Hexacosane	630-01-3	100.0	1000	1000
n-Octacosane	630-02-4	99.9	1001	1000
n-Triacontane	638-68-6	99.7	1002	999
Hexatriacontane	630-06-8	98.0	1002	982

¹ All weights are traceable through NIST, Test No. 822-275872-11
² Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is $\pm 0.24\%$. The CRM Uncertainty calculated for this product is $\pm 5\%$. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.
A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.
Labels and certificates follow U.S. Conventions in reporting numerical values:
A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.
See reverse side for additional information.

Certified By: 
Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

GHS safety information

CAS Number to easily identify compound

Compounds assembled into a standard based on method requirements and customer formulation request - all reviewed for solubility and coelution potential prior to manufacture.

We use only high purity starting material.

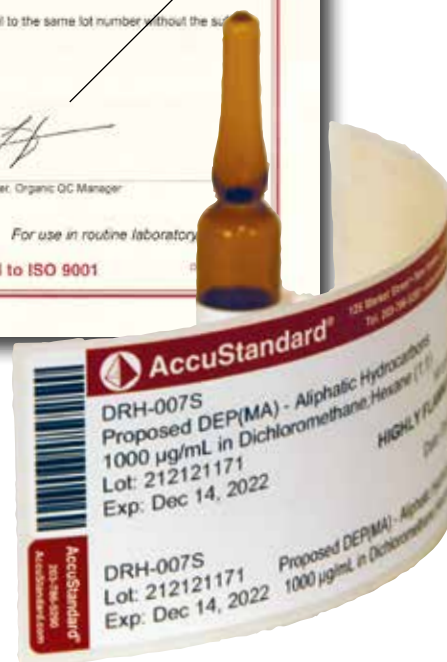
Concentration calculated by using the purity of the starting material

NIST Traceability

QC management approval

Uncertainty reported for statistical confidence.

Accreditations



Custom Synthesis

AccuStandard has developed hundreds of pure chemical compounds for companies, research institutions and governmental agencies around the world. Custom synthesis capabilities range from milligram to kilogram scale. AccuStandard is renowned for its quick response to customer requests for new compounds and its partnership in developing new methods.

Synthesis of many organic pollutants and their metabolites is an integral part of the department's efforts to provide the international community with previously unavailable standards. This is especially true for flame retardants, explosives and pesticides.



Custom Synthesized Products include:

- PCBs (all 209 congeners), hydroxy, methoxy and methylsulfonyl metabolites
- PBDEs (all 209 congeners), hydroxy, methoxy and chloro metabolites
- Chloro- and bromodibenzodioxins and furans
- Fluorinated PBDEs
- Brominated Flame Retardants, metabolites and isomers
- PBBs
- PAHs, nitro-PAHs and methyl-PAHs
- Pesticides and metabolites
- Explosives and metabolites
- Nonyl- and octylphenol ethoxylates
- Mono- and di-phthalate esters
- Organophosphate Flame Retardants

For additional information or
to submit your request, visit
AccuStandard.com

Organic Single Analytes and Select Mixtures

New & Updated Products in RED

Persistent Organic Pollutants (POPs)

POPs are chemical substances that persist in the environment, bioaccumulate through the food web and pose a risk of causing adverse effects to human health and the environment. A specific list of POPs was defined in 1995 by the United Nations, and this list was the center of the Stockholm Convention in 2001. The list originally included "the dirty dozen" and was expanded to include other pesticides, PBDEs, and some chemicals used in industrial processes.

Individual analytes used in EPA Methods are listed on page 67-68

Indices: Catalog Number, CAS Number and Organic Analytes are listed in the back of catalog.

Table of Contents

Persistent Organic Pollutants (POP)	3-66
Polychlorinated biphenyls (PCBs) and Metabolites	3-18
Halogenated Aromatics (other than PCBs & PBDEs)	19-20
Dibenzo-p-dioxins	21-22
Dibenzofurans	23
Polybrominated Diphenyl Ethers (PBDEs) and Metabolites, other Brominated Flame Retardants (BFRs), Organophosphate FRs	26-38
Polynuclear Aromatic Hydrocarbons (PAHs) and Derivatives	39-43
Nitrogen Containing Compounds	44
Pesticides and Herbicides 125+ NEW, Neonicotinoids	45-66
Volatiles (VOCs)	67-70
Analytes by Functional Group	71-80
Alcohols	71
Aldehydes and Derivatives	71-72
Ketones and Derivatives	72
Phenols	73-74
Amines, Anilines and other Amino Compounds	74-76
Ethers	77
Halo Ethers	77
Haloacetic Acids	77
Phthalates	78-80
Analytes by Application	81-111
Explosives and Firearm Discharge	82-85
Fuels and Hydrocarbons (Petrochemical section)	307-310
Plastic Additives and Bisphenol Analogs, Imidazoles	86-92
Food Analytes (Lipids, Vitamins and Preservatives)	92-97
Fatty Acid Methyl and Ethyl Esters (FAMES, FAEEs)	96-97
Allergens (Personal Care Products)	98-103
Dyes	104-106
Perfluorinated Acids and Salts (PFOA, PFOS)	107
Odor Standards	107
Irritant Standards	107
Refrigerants	108
Qualitative Kits	109-111



Visit our website for
the latest New Products
www.accustandard.com



History of PCBs

History

Polychlorinated biphenyls (PCBs) have been the subject of numerous studies and investigations over the last several decades because of their environmental persistence and bioaccumulation.

Their abundance as a pollutant stems from their worldwide manufacture as heavily-used industrial chemicals (in the USA, as Aroclors by Monsanto), with the main application as a di-electric fluid for capacitors and transformers. As late as 1984, about 758 million pounds were still in use in the United States alone.

Regulatory Actions

The overwhelming problem with PCBs is their continuing environmental impact. Their stability and widespread prior use has caused global contamination of soils, rivers and other waterways that could affect our food and water supplies for years to come.

This problem has become of paramount concern to the US EPA, which prohibited, under Section 6(e) of the Toxic Substances Control Act, the use of PCBs, except in totally enclosed systems, after July 1, 1978; the manufacture of PCBs, after January 1, 1979 and the processing and distribution in commerce of PCBs after July 1, 1979. PCBs used as industrial chemicals were totally prohibited after July 1, 1984.

Toxicity & Bioaccumulation

The chemical formulation of PCBs and their similarity to the chemical formulation of pesticides such as DDT has led to bioaccumulation.

One of the first signals of the effect of PCBs on the environment in the United States was noted in 1970 on Great Gull Island at the entrance to Long Island Sound. Scientists observed a sharp increase in the number of abnormalities found in young sea gulls such as feather loss, crossed beaks, and four legs. In addition, the egg shells were extremely thin.

In 1968 Japan documented the first of over 1200 human patients, many of them children, who developed acne-type skin eruptions (chloracne) and other clinical symptoms. These symptoms were eventually traced to the ingestion of the industrial PCB, Kanechlor 400, (trademark of the Kanegafuchi Chemical Industry Company) which had been blended with Rice Oil (Yusho) used in cooking.

The malady was thus termed Yusho Disease. The average amount of actual PCBs consumed by the victims was estimated at 2 grams. By 1973, 22 of the 1200 victims had died, 41% from malignant tumors, suggesting a possible link to PCB ingestion.

PCB Groupings and Formulations

Toxicity and molecular structure

PCB Congeners can be grouped according to their presence in the technical mixtures (i.e. Aroclors) and according to their toxicity, generally falling into the following pattern:

Congeners that contain fewer chlorine substitutions in the ortho positions are more toxic than those having more chlorines in those positions. The most toxic are the tetra, penta and hexachlorobiphenyl congeners that are unsubstituted in the ortho position (which makes them dioxin-like).

Analytical Methods and Reference Materials

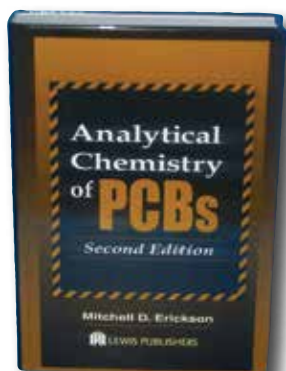
To obtain meaningful analytical data, the congeners need to be formulated into groupings of solutions that are all resolved on a gas chromatographic column. The "holy grail" of columns, the single column on which all 209 congeners are separated has, to this date, eluded all GC column manufacturers.

There are 2 columns that are closest to achieving the "holy grail" status of separating all the PCB congeners. They are Agilent DB-XLB & SGE's HT 8 which resolve all but 4 pairs of significant congeners and 5 pairs of minor congeners.

George Frame and his co-workers at General Electric Company have coordinated a seminal study of specially formulated PCB groups - five of which are composed of the congeners contained in Aroclors, the remaining four mixtures contain those congeners generally absent in Aroclors. AccuStandard prepared and supplied the nine mixtures used in Dr. Frame's study from its inventory of the 209 pure congeners.

The nine mixtures were then tested on 17 different columns by independent laboratories and column manufacturers. The resulting chromatographic retention time and response data was compiled and published. This information has proven invaluable for identification and quantification of the different Aroclors as well as for congener specific analysis.

In the course of the investigations, it was determined that some of the 209 congeners that constitute the industrial PCB product behave differently than others and it is very helpful, even essential, to the scientific and regulatory communities, that individual congeners be available. For this reason, the EPA permits the synthesis and distribution of small quantities for research purposes.



PCB Book

Analytical Chemistry of PCBs
BOOK-PCB-001

To facilitate the availability and distribution of PCBs, the EPA granted manufacturing and export exemptions to a few select standards manufacturers.

The Founder of AccuStandard, Inc. was the first to obtain this exemption. AccuStandard is the leader in synthesizing PCBs. Indeed, it is the first - and so far the only - manufacturer to have synthesized all 209 congeners. Our expertise can assist you in your PCB investigations.

Analytical Chemistry of PCBs

The Second Edition of this book is a comprehensive review of the analytical chemistry of PCBs. It is an invaluable resource for both chemists with no experience in PCB analysis and seasoned PCB researchers.

Chlorobiphenyl Congeners (PCBs)



- All 209 possible congeners are available in Neat and Solution form
- All congeners are 99+% pure by GC/FID and GC/MS

Technical Note

For specific applications (e.g. toxicological studies) that require absolute dioxin and furan free PCBs please contact Technical Service.

209 Solutions in a Set **Exclusive**

C-35-SET 35 µg/mL in Isooctane
C-100-SET 100 µg/mL in Isooctane

set of 209 x 1 mL
set of 209 x 1 mL

Purity 99+%

Chlorobiphenyl Congeners (PCBs)

No.	Compound	CAS No.	NEAT Cat. No.	Unit	SOLUTIONS in Isooctane			
					35 µg/mL Cat. No.	1 mL	100 µg/mL Cat. No.	1 mL
1	2-Chlorobiphenyl	2051-60-7	C-001N	50 mg	C-001S		C-001S-TP	
2	3-Chlorobiphenyl	2051-61-8	C-002N	50 mg	C-002S		C-002S-TP	
3	4-Chlorobiphenyl	2051-62-9	C-003N	50 mg	C-003S		C-003S-TP	
4	2,2'-Dichlorobiphenyl	13029-08-8	C-004N	25 mg	C-004S		C-004S-TP	
5	2,3-Dichlorobiphenyl	16605-91-7	C-005N	50 mg	C-005S		C-005S-TP	
6	2,3'-Dichlorobiphenyl	25569-80-6	C-006N	5 mg	C-006S		C-006S-TP	
7	2,4-Dichlorobiphenyl	33284-50-3	C-007N	25 mg	C-007S		C-007S-TP	
8	2,4'-Dichlorobiphenyl	34883-43-7	C-008N	25 mg	C-008S		C-008S-TP	
9	2,5-Dichlorobiphenyl	34883-39-1	C-009N	50 mg	C-009S		C-009S-TP	
10	2,6-Dichlorobiphenyl	33146-45-1	C-010N	25 mg	C-010S		C-010S-TP	
11	3,3'-Dichlorobiphenyl	2050-67-1	C-011N	50 mg	C-011S		C-011S-TP	
12	3,4-Dichlorobiphenyl	2974-92-7	C-012N	50 mg	C-012S		C-012S-TP	
13	3,4'-Dichlorobiphenyl	2974-90-5	C-013N	5 mg	C-013S		C-013S-TP	
14	3,5-Dichlorobiphenyl	34883-41-5	C-014N	50 mg	C-014S		C-014S-TP	
15	4,4'-Dichlorobiphenyl	2050-68-2	C-015N	10 mg	C-015S		C-015S-TP	
16	2,2',3-Trichlorobiphenyl	38444-78-9	C-016N	5 mg	C-016S		C-016S-TP	
17	2,2',4-Trichlorobiphenyl	37680-66-3	C-017N	5 mg	C-017S		C-017S-TP	
18	2,2',5-Trichlorobiphenyl	37680-65-2	C-018N	25 mg	C-018S		C-018S-TP	
19	2,2',6-Trichlorobiphenyl	38444-73-4	C-019N	5 mg	C-019S		C-019S-TP	
20	2,3,3'-Trichlorobiphenyl	38444-84-7	C-020N	5 mg	C-020S		C-020S-TP	
21	2,3,4-Trichlorobiphenyl	55702-46-0	C-021N	25 mg	C-021S		C-021S-TP	
22	2,3,4'-Trichlorobiphenyl	38444-85-8	C-022N	5 mg	C-022S		C-022S-TP	
23	2,3,5-Trichlorobiphenyl	55720-44-0	C-023N	5 mg	C-023S		C-023S-TP	
24	2,3,6-Trichlorobiphenyl	55702-45-9	C-024N	10 mg	C-024S		C-024S-TP	
25	2,3',4-Trichlorobiphenyl	55712-37-3	C-025N	5 mg	C-025S		C-025S-TP	
26	2,3',5-Trichlorobiphenyl	38444-81-4	C-026N	25 mg	C-026S		C-026S-TP	
27	2,3',6-Trichlorobiphenyl	38444-76-7	C-027N	5 mg	C-027S		C-027S-TP	
28	2,4,4'-Trichlorobiphenyl	7012-37-5	C-028N	10 mg	C-028S		C-028S-TP	
29	2,4,5-Trichlorobiphenyl	15862-07-4	C-029N	50 mg	C-029S		C-029S-TP	
30	2,4,6-Trichlorobiphenyl	35693-92-6	C-030N	50 mg	C-030S		C-030S-TP	
31	2,4',5-Trichlorobiphenyl	16606-02-3	C-031N	25 mg	C-031S		C-031S-TP	
32	2,4',6-Trichlorobiphenyl	38444-77-8	C-032N	5 mg	C-032S		C-032S-TP	
33	2',3,4-Trichlorobiphenyl	38444-86-9	C-033N	10 mg	C-033S		C-033S-TP	
34	2',3,5-Trichlorobiphenyl	37680-68-5	C-034N	5 mg	C-034S		C-034S-TP	
35	3,3',4-Trichlorobiphenyl	37680-69-6	C-035N	5 mg	C-035S		C-035S-TP	
36	3,3',5-Trichlorobiphenyl	38444-87-0	C-036N	5 mg	C-036S		C-036S-TP	
37	3,4,4'-Trichlorobiphenyl	38444-90-5	C-037N	5 mg	C-037S		C-037S-TP	
38	3,4,5-Trichlorobiphenyl	53555-66-1	C-038N	5 mg	C-038S		C-038S-TP	
39	3,4',5-Trichlorobiphenyl	38444-88-1	C-039N	5 mg	C-039S		C-039S-TP	



Chlorobiphenyl Congeners (PCBs)
continued on next page



Chlorobiphenyl Congeners (PCBs)

Purity 99+%

Chlorobiphenyl Congeners (PCBs)

No.	Compound	CAS No.	NEAT Cat. No.	Unit	SOLUTIONS in Isooctane	
					35 µg/mL Cat. No.	100 µg/mL Cat. No.
40	2,2',3,3'-Tetrachlorobiphenyl	38444-93-8	C-040N	50 mg	C-040S	C-040S-TP
41	2,2',3,4-Tetrachlorobiphenyl	52663-59-9	C-041N	5 mg	C-041S	C-041S-TP
42	2,2',3,4'-Tetrachlorobiphenyl	36559-22-5	C-042N	5 mg	C-042S	C-042S-TP
43	2,2',3,5-Tetrachlorobiphenyl	70362-46-8	C-043N	5 mg	C-043S	C-043S-TP
44	2,2',3,5'-Tetrachlorobiphenyl	41464-39-5	C-044N	25 mg	C-044S	C-044S-TP
45	2,2',3,6-Tetrachlorobiphenyl	70362-45-7	C-045N	5 mg	C-045S	C-045S-TP
46	2,2',3,6'-Tetrachlorobiphenyl	41464-47-5	C-046N	5 mg	C-046S	C-046S-TP
47	2,2',4,4'-Tetrachlorobiphenyl	2437-79-8	C-047N	50 mg	C-047S	C-047S-TP
48	2,2',4,5-Tetrachlorobiphenyl	70362-47-9	C-048N	5 mg	C-048S	C-048S-TP
49	2,2',4,5'-Tetrachlorobiphenyl	41464-40-8	C-049N	20 mg	C-049S	C-049S-TP
50	2,2',4,6-Tetrachlorobiphenyl	62796-65-0	C-050N	5 mg	C-050S	C-050S-TP
51	2,2',4,6'-Tetrachlorobiphenyl	68194-04-7	C-051N	5 mg	C-051S	C-051S-TP
52	2,2',5,5'-Tetrachlorobiphenyl	35693-99-3	C-052N	10 mg	C-052S	C-052S-TP
53	2,2',5,6-Tetrachlorobiphenyl	41464-41-9	C-053N	25 mg	C-053S	C-053S-TP
54	2,2',6,6'-Tetrachlorobiphenyl	15968-05-5	C-054N	50 mg	C-054S	C-054S-TP
55	2,3,3',4-Tetrachlorobiphenyl	74338-24-2	C-055N	5 mg	C-055S	C-055S-TP
56	2,3,3',4'-Tetrachlorobiphenyl	41464-43-1	C-056N	5 mg	C-056S	C-056S-TP
57	2,3,3',5-Tetrachlorobiphenyl	70424-67-8	C-057N	5 mg	C-057S	C-057S-TP
58	2,3,3',5'-Tetrachlorobiphenyl	41464-49-7	C-058N	5 mg	C-058S	C-058S-TP
59	2,3,3',6-Tetrachlorobiphenyl	74472-33-6	C-059N	5 mg	C-059S	C-059S-TP
60	2,3,4,4'-Tetrachlorobiphenyl	33025-41-1	C-060N	5 mg	C-060S	C-060S-TP
61	2,3,4,5-Tetrachlorobiphenyl	33284-53-6	C-061N	50 mg	C-061S	C-061S-TP
62	2,3,4,6-Tetrachlorobiphenyl	54230-22-7	C-062N	5 mg	C-062S	C-062S-TP
63	2,3,4',5-Tetrachlorobiphenyl	74472-34-7	C-063N	5 mg	C-063S	C-063S-TP
64	2,3,4',6-Tetrachlorobiphenyl	52663-58-8	C-064N	5 mg	C-064S	C-064S-TP
65	2,3,5,6-Tetrachlorobiphenyl	33284-54-7	C-065N	25 mg	C-065S	C-065S-TP
66	2,3',4,4'-Tetrachlorobiphenyl	32598-10-0	C-066N	20 mg	C-066S	C-066S-TP
67	2,3',4,5-Tetrachlorobiphenyl	73557-53-8	C-067N	5 mg	C-067S	C-067S-TP
68	2,3',4,5'-Tetrachlorobiphenyl	73575-52-7	C-068N	5 mg	C-068S	C-068S-TP
69	2,3',4,6-Tetrachlorobiphenyl	60233-24-1	C-069N	5 mg	C-069S	C-069S-TP
70	2,3',4',5-Tetrachlorobiphenyl	32598-11-1	C-070N	10 mg	C-070S	C-070S-TP
71	2,3',4',6-Tetrachlorobiphenyl	41464-46-4	C-071N	5 mg	C-071S	C-071S-TP
72	2,3',5,5'-Tetrachlorobiphenyl	41464-42-0	C-072N	25 mg	C-072S	C-072S-TP
73	2,3',5',6-Tetrachlorobiphenyl	74338-23-1	C-073N	5 mg	C-073S	C-073S-TP
74	2,4,4',5-Tetrachlorobiphenyl	32690-93-0	C-074N	5 mg	C-074S	C-074S-TP
75	2,4,4',6-Tetrachlorobiphenyl	32598-12-2	C-075N	5 mg	C-075S	C-075S-TP
76	2',3,4,5-Tetrachlorobiphenyl	70362-48-0	C-076N	5 mg	C-076S	C-076S-TP
77	3,3',4,4'-Tetrachlorobiphenyl	32598-13-3	C-077N	25 mg	C-077S	C-077S-TP
78	3,3',4,5-Tetrachlorobiphenyl	70362-49-1	C-078N	5 mg	C-078S	C-078S-TP
79	3,3',4,5'-Tetrachlorobiphenyl	41464-48-6	C-079N	5 mg	C-079S	C-079S-TP
80	3,3',5,5'-Tetrachlorobiphenyl	33284-52-5	C-080N	5 mg	C-080S	C-080S-TP
81	3,4,4',5-Tetrachlorobiphenyl	70362-50-4	C-081N	5 mg	C-081S	C-081S-TP
82	2,2',3,3',4-Pentachlorobiphenyl	52663-62-4	C-082N	5 mg	C-082S	C-082S-TP
83	2,2',3,3',5-Pentachlorobiphenyl	60145-20-2	C-083N	5 mg	C-083S	C-083S-TP
84	2,2',3,3',6-Pentachlorobiphenyl	52663-60-2	C-084N	5 mg	C-084S	C-084S-TP
85	2,2',3,4,4'-Pentachlorobiphenyl	65510-45-4	C-085N	5 mg	C-085S	C-085S-TP
86	2,2',3,4,5-Pentachlorobiphenyl	55312-69-1	C-086N	5 mg	C-086S	C-086S-TP
87	2,2',3,4,5'-Pentachlorobiphenyl	38380-02-8	C-087N	10 mg	C-087S	C-087S-TP
88	2,2',3,4,6-Pentachlorobiphenyl	55215-17-3	C-088N	5 mg	C-088S	C-088S-TP
89	2,2',3,4,6'-Pentachlorobiphenyl	73575-57-2	C-089N	5 mg	C-089S	C-089S-TP
90	2,2',3,4',5-Pentachlorobiphenyl	68194-07-0	C-090N	5 mg	C-090S	C-090S-TP
91	2,2',3,4',6-Pentachlorobiphenyl	68194-05-8	C-091N	5 mg	C-091S	C-091S-TP
92	2,2',3,5,5'-Pentachlorobiphenyl	52663-61-3	C-092N	5 mg	C-092S	C-092S-TP
93	2,2',3,5,6-Pentachlorobiphenyl	73575-56-1	C-093N	5 mg	C-093S	C-093S-TP
94	2,2',3,5,6'-Pentachlorobiphenyl	73575-55-0	C-094N	5 mg	C-094S	C-094S-TP
95	2,2',3,5',6-Pentachlorobiphenyl	38379-99-6	C-095N	5 mg	C-095S	C-095S-TP
96	2,2',3,6,6'-Pentachlorobiphenyl	73575-54-9	C-096N	5 mg	C-096S	C-096S-TP
97	2,2',3',4,5-Pentachlorobiphenyl	41464-51-1	C-097N	10 mg	C-097S	C-097S-TP
98	2,2',3',4,6-Pentachlorobiphenyl	60233-25-2	C-098N	5 mg	C-098S	C-098S-TP
99	2,2',4,4',5-Pentachlorobiphenyl	38380-01-7	C-099N	5 mg	C-099S	C-099S-TP
100	2,2',4,4',6-Pentachlorobiphenyl	39485-83-1	C-100N	5 mg	C-100S	C-100S-TP
101	2,2',4,5,5'-Pentachlorobiphenyl	37680-73-2	C-101N	10 mg	C-101S	C-101S-TP
102	2,2',4,5,6'-Pentachlorobiphenyl	68194-06-9	C-102N	5 mg	C-102S	C-102S-TP
103	2,2',4,5',6-Pentachlorobiphenyl	60145-21-3	C-103N	10 mg	C-103S	C-103S-TP
104	2,2',4,6,6'-Pentachlorobiphenyl	56558-16-8	C-104N	5 mg	C-104S	C-104S-TP
105	2,3,3',4,4'-Pentachlorobiphenyl	32598-14-4	C-105N	5 mg	C-105S	C-105S-TP
106	2,3,3',4,5-Pentachlorobiphenyl	70424-69-0	C-106N	5 mg	C-106S	C-106S-TP

PCBs

Chlorobiphenyl Congeners (PCBs)



Purity 99+%

PCBs

Chlorobiphenyl Congeners (PCBs)

No.	Compound	CAS No.	NEAT Cat. No.	Unit	SOLUTIONS in Isooctane	
					35 µg/mL Cat. No.	100 µg/mL Cat. No.
107	2,3,3',4',5-Pentachlorobiphenyl	70424-68-9	C-107N	5 mg	C-107S	C-107S-TP
108	2,3,3',4,5'-Pentachlorobiphenyl	70362-41-3	C-108N	5 mg	C-108S	C-108S-TP
109	2,3,3',4,6-Pentachlorobiphenyl	74472-35-8	C-109N	5 mg	C-109S	C-109S-TP
110	2,3,3',4',6-Pentachlorobiphenyl	38380-03-9	C-110N	5 mg	C-110S	C-110S-TP
111	2,3,3',5,5'-Pentachlorobiphenyl	39635-32-0	C-111N	5 mg	C-111S	C-111S-TP
112	2,3,3',5,6-Pentachlorobiphenyl	74472-36-9	C-112N	5 mg	C-112S	C-112S-TP
113	2,3,3',5',6-Pentachlorobiphenyl	68194-10-5	C-113N	5 mg	C-113S	C-113S-TP
114	2,3,4,4',5-Pentachlorobiphenyl	74472-37-0	C-114N	5 mg	C-114S	C-114S-TP
115	2,3,4,4',6-Pentachlorobiphenyl	74472-38-1	C-115N	5 mg	C-115S	C-115S-TP
116	2,3,4,5,6-Pentachlorobiphenyl	18259-05-7	C-116N	10 mg	C-116S	C-116S-TP
117	2,3,4',5,6-Pentachlorobiphenyl	68194-11-6	C-117N	5 mg	C-117S	C-117S-TP
118	2,3',4,4',5-Pentachlorobiphenyl	31508-00-6	C-118N	5 mg	C-118S	C-118S-TP
119	2,3',4,4',6-Pentachlorobiphenyl	56558-17-9	C-119N	5 mg	C-119S	C-119S-TP
120	2,3',4,5,5'-Pentachlorobiphenyl	68194-12-7	C-120N	5 mg	C-120S	C-120S-TP
121	2,3',4,5',6-Pentachlorobiphenyl	56558-18-0	C-121N	5 mg	C-121S	C-121S-TP
122	2',3,3',4,5-Pentachlorobiphenyl	76842-07-4	C-122N	5 mg	C-122S	C-122S-TP
123	2',3,4,4',5-Pentachlorobiphenyl	65510-44-3	C-123N	5 mg	C-123S	C-123S-TP
124	2',3,4,5,5'-Pentachlorobiphenyl	70424-70-3	C-124N	5 mg	C-124S	C-124S-TP
125	2',3,4,5,6'-Pentachlorobiphenyl	74472-39-2	C-125N	5 mg	C-125S	C-125S-TP
126	3,3',4,4',5-Pentachlorobiphenyl	57465-28-8	C-126N	5 mg	C-126S	C-126S-TP
127	3,3',4,5,5'-Pentachlorobiphenyl	39635-33-1	C-127N	5 mg	C-127S	C-127S-TP
128	2,2',3,3',4,4'-Hexachlorobiphenyl	38380-07-3	C-128N	20 mg	C-128S	C-128S-TP
129	2,2',3,3',4,5'-Hexachlorobiphenyl	55215-18-4	C-129N	5 mg	C-129S	C-129S-TP
130	2,2',3,3',4,5'-Hexachlorobiphenyl	52663-66-8	C-130N	5 mg	C-130S	C-130S-TP
131	2,2',3,3',4,6'-Hexachlorobiphenyl	61798-70-7	C-131N	5 mg	C-131S	C-131S-TP
132	2,2',3,3',4,6'-Hexachlorobiphenyl	38380-05-1	C-132N	5 mg	C-132S	C-132S-TP
133	2,2',3,3',5,5'-Hexachlorobiphenyl	35694-04-3	C-133N	5 mg	C-133S	C-133S-TP
134	2,2',3,3',5,6'-Hexachlorobiphenyl	52704-70-8	C-134N	5 mg	C-134S	C-134S-TP
135	2,2',3,3',5,6'-Hexachlorobiphenyl	52744-13-5	C-135N	5 mg	C-135S	C-135S-TP
136	2,2',3,3',6,6'-Hexachlorobiphenyl	38411-22-2	C-136N	20 mg	C-136S	C-136S-TP
137	2,2',3,4,4',5'-Hexachlorobiphenyl	35694-06-5	C-137N	5 mg	C-137S	C-137S-TP
138	2,2',3,4,4',5'-Hexachlorobiphenyl	35065-28-2	C-138N	5 mg	C-138S	C-138S-TP
139	2,2',3,4,4',6'-Hexachlorobiphenyl	56030-56-9	C-139N	5 mg	C-139S	C-139S-TP
140	2,2',3,4,4',6'-Hexachlorobiphenyl	59291-64-4	C-140N	5 mg	C-140S	C-140S-TP
141	2,2',3,4,5,5'-Hexachlorobiphenyl	52712-04-6	C-141N	5 mg	C-141S	C-141S-TP
142	2,2',3,4,5,6'-Hexachlorobiphenyl	41411-61-4	C-142N	5 mg	C-142S	C-142S-TP
143	2,2',3,4,5,6'-Hexachlorobiphenyl	68194-15-0	C-143N	5 mg	C-143S	C-143S-TP
144	2,2',3,4,5',6'-Hexachlorobiphenyl	68194-14-9	C-144N	5 mg	C-144S	C-144S-TP
145	2,2',3,4,6,6'-Hexachlorobiphenyl	74472-40-5	C-145N	5 mg	C-145S	C-145S-TP
146	2,2',3,4',5,5'-Hexachlorobiphenyl	51908-16-8	C-146N	5 mg	C-146S	C-146S-TP
147	2,2',3,4',5,6'-Hexachlorobiphenyl	68194-13-8	C-147N	5 mg	C-147S	C-147S-TP
148	2,2',3,4',5,6'-Hexachlorobiphenyl	74472-41-6	C-148N	5 mg	C-148S	C-148S-TP
149	2,2',3,4',5',6'-Hexachlorobiphenyl	38380-04-0	C-149N	5 mg	C-149S	C-149S-TP
150	2,2',3,4',6,6'-Hexachlorobiphenyl	68194-08-1	C-150N	5 mg	C-150S	C-150S-TP
151	2,2',3,5,5',6'-Hexachlorobiphenyl	52663-63-5	C-151N	5 mg	C-151S	C-151S-TP
152	2,2',3,5,6,6'-Hexachlorobiphenyl	68194-09-2	C-152N	5 mg	C-152S	C-152S-TP
153	2,2',4,4',5,5'-Hexachlorobiphenyl	35065-27-1	C-153N	10 mg	C-153S	C-153S-TP
154	2,2',4,4',5,6'-Hexachlorobiphenyl	60145-22-4	C-154N	5 mg	C-154S	C-154S-TP
155	2,2',4,4',6,6'-Hexachlorobiphenyl	33979-03-2	C-155N	50 mg	C-155S	C-155S-TP
156	2,3,3',4,4',5-Hexachlorobiphenyl	38380-08-4	C-156N	5 mg	C-156S	C-156S-TP
157	2,3,3',4,4',5'-Hexachlorobiphenyl	69782-90-7	C-157N	5 mg	C-157S	C-157S-TP
158	2,3,3',4,4',6-Hexachlorobiphenyl	74472-42-7	C-158N	5 mg	C-158S	C-158S-TP
159	2,3,3',4,5,5'-Hexachlorobiphenyl	39635-35-3	C-159N	5 mg	C-159S	C-159S-TP
160	2,3,3',4,5,6-Hexachlorobiphenyl	41411-62-5	C-160N	5 mg	C-160S	C-160S-TP
161	2,3,3',4,5',6-Hexachlorobiphenyl	74474-43-8	C-161N	5 mg	C-161S	C-161S-TP
162	2,3,3',4',5,5'-Hexachlorobiphenyl	39635-34-2	C-162N	5 mg	C-162S	C-162S-TP
163	2,3,3',4',5,6-Hexachlorobiphenyl	74472-44-9	C-163N	5 mg	C-163S	C-163S-TP
164	2,3,3',4',5',6-Hexachlorobiphenyl	74472-45-0	C-164N	5 mg	C-164S	C-164S-TP
165	2,3,3',5,5',6-Hexachlorobiphenyl	74472-46-1	C-165N	5 mg	C-165S	C-165S-TP
166	2,3,4,4',5,6-Hexachlorobiphenyl	41411-63-6	C-166N	5 mg	C-166S	C-166S-TP
167	2,3',4,4',5,5'-Hexachlorobiphenyl	52663-72-6	C-167N	5 mg	C-167S	C-167S-TP
168	2,3',4,4',5',6-Hexachlorobiphenyl	59291-65-5	C-168N	5 mg	C-168S	C-168S-TP
169	3,3',4,4',5,5'-Hexachlorobiphenyl	32774-16-6	C-169N	5 mg	C-169S	C-169S-TP

Other solvents, concentrations and quantities are available upon request.

Chlorobiphenyl Congeners (PCBs)
continued on next page



Chlorobiphenyl Congeners (PCBs)

Purity 99+%

Chlorobiphenyl Congeners (PCBs)

No.	Compound	CAS No.	NEAT Cat. No.	Unit	SOLUTIONS in Isooctane	
					35 µg/mL Cat. No.	100 µg/mL Cat. No.
170	2,2',3,3',4,4',5-Heptachlorobiphenyl	35065-30-6	C-170N	5 mg	C-170S	C-170S-TP
171	2,2',3,3',4,4',6-Heptachlorobiphenyl	52663-71-5	C-171N	5 mg	C-171S	C-171S-TP
172	2,2',3,3',4,5,5'-Heptachlorobiphenyl	52663-74-8	C-172N	5 mg	C-172S	C-172S-TP
173	2,2',3,3',4,5,6-Heptachlorobiphenyl	68194-16-1	C-173N	5 mg	C-173S	C-173S-TP
174	2,2',3,3',4,5,6'-Heptachlorobiphenyl	38411-25-5	C-174N	5 mg	C-174S	C-174S-TP
175	2,2',3,3',4,5',6-Heptachlorobiphenyl	40186-70-7	C-175N	5 mg	C-175S	C-175S-TP
176	2,2',3,3',4,6,6'-Heptachlorobiphenyl	52663-65-7	C-176N	5 mg	C-176S	C-176S-TP
177	2,2',3,3',4',5,6-Heptachlorobiphenyl	52663-70-4	C-177N	5 mg	C-177S	C-177S-TP
178	2,2',3,3',4',5',6-Heptachlorobiphenyl	52663-67-9	C-178N	5 mg	C-178S	C-178S-TP
179	2,2',3,3',5,6,6'-Heptachlorobiphenyl	52663-64-6	C-179N	5 mg	C-179S	C-179S-TP
180	2,2',3,4,4',5,5'-Heptachlorobiphenyl	35065-29-3	C-180N	5 mg	C-180S	C-180S-TP
181	2,2',3,4,4',5,6-Heptachlorobiphenyl	74472-47-2	C-181N	5 mg	C-181S	C-181S-TP
182	2,2',3,4,4',5,6'-Heptachlorobiphenyl	60145-23-5	C-182N	5 mg	C-182S	C-182S-TP
183	2,2',3,4,4',5',6-Heptachlorobiphenyl	52663-69-1	C-183N	5 mg	C-183S	C-183S-TP
184	2,2',3,4,4',6,6'-Heptachlorobiphenyl	74472-48-3	C-184N	5 mg	C-184S	C-184S-TP
185	2,2',3,4,5,5',6-Heptachlorobiphenyl	52712-05-7	C-185N	5 mg	C-185S	C-185S-TP
186	2,2',3,4,5,6,6'-Heptachlorobiphenyl	74472-49-4	C-186N	5 mg	C-186S	C-186S-TP
187	2,2',3,4',5,5',6-Heptachlorobiphenyl	52663-68-0	C-187N	5 mg	C-187S	C-187S-TP
188	2,2',3,4',5,6,6'-Heptachlorobiphenyl	74487-85-7	C-188N	5 mg	C-188S	C-188S-TP
189	2,2',3,3',4,4',5,5'-Heptachlorobiphenyl	39635-31-9	C-189N	5 mg	C-189S	C-189S-TP
190	2,3,3',4,4',5,6-Heptachlorobiphenyl	41411-64-7	C-190N	5 mg	C-190S	C-190S-TP
191	2,3,3',4,4',5',6-Heptachlorobiphenyl	74472-50-7	C-191N	5 mg	C-191S	C-191S-TP
192	2,3,3',4,5,5',6-Heptachlorobiphenyl	74472-51-8	C-192N	5 mg	C-192S	C-192S-TP
193	2,3,3',4',5,5',6-Heptachlorobiphenyl	69782-91-8	C-193N	5 mg	C-193S	C-193S-TP
194	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	35694-08-7	C-194N	5 mg	C-194S	C-194S-TP
195	2,2',3,3',4,4',5,6-Octachlorobiphenyl	52663-78-2	C-195N	5 mg	C-195S	C-195S-TP
196	2,2',3,3',4,4',5,6'-Octachlorobiphenyl	42740-50-1	C-196N	5 mg	C-196S	C-196S-TP
197	2,2',3,3',4,4',6,6'-Octachlorobiphenyl	33091-17-7	C-197N	5 mg	C-197S	C-197S-TP
198	2,2',3,3',4,5,5',6-Octachlorobiphenyl	68194-17-2	C-198N	5 mg	C-198S	C-198S-TP
199	2,2',3,3',4,5,5',6'-Octachlorobiphenyl	52663-75-9	C-199N-R1	5 mg	C-199S-R1	C-199S-TP-R1
200	2,2',3,3',4,5,6,6'-Octachlorobiphenyl	52663-73-7	C-200N-R1	5 mg	C-200S-R1	C-200S-TP-R1
201	2,2',3,3',4,5',6,6'-Octachlorobiphenyl	40186-71-8	C-201N-R1	5 mg	C-201S-R1	C-201S-TP-R1
202	2,2',3,3',5,5',6,6'-Octachlorobiphenyl	2136-99-4	C-202N	5 mg	C-202S	C-202S-TP
203	2,2',3,3',4,4',5,5',6-Octachlorobiphenyl	52663-76-0	C-203N	5 mg	C-203S	C-203S-TP
204	2,2',3,4,4',5,6,6'-Octachlorobiphenyl	74472-52-9	C-204N	5 mg	C-204S	C-204S-TP
205	2,3,3',4,4',5,5',6-Octachlorobiphenyl	74472-53-0	C-205N	5 mg	C-205S	C-205S-TP
206	2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl	40186-72-9	C-206N	5 mg	C-206S	C-206S-TP
207	2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	52663-79-3	C-207N	5 mg	C-207S	C-207S-TP
208	2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	52663-77-1	C-208N	5 mg	C-208S	C-208S-TP
209	2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	C-209N	10 mg	C-209S	C-209S-TP

Technical Note

The PCB congener numbering system is now being used. The only changes from the BZ numbering system affect congeners #199 (formerly BZ#201), #200 (formerly BZ#199) and #201 (formerly BZ#200).

Savings

Significant discounts are available on larger quantities of selected congeners.

Have PCB Questions?

AccuStandard chemists have been involved in the synthesis of PCBs and related compounds for over 35 years.

Our experience and expertise in this area can help you solve related analytical problems.

Contact our Technical Service Department



Mixtures for Congener Specific PCB Analysis

Method 1668 Congener Set of 209 Chlorinated Biphenyl Congeners by GC/MS (continued)

PCB Congener Mix #4

M-1668A-4-0.01X

At stated conc. in Isooctane

1 x 1 mL

15 comps.

2,3',4'-Trichlorobiphenyl	(2.5 µg/mL)
2,3,4'-Trichlorobiphenyl	(2.5 µg/mL)
2,3',4,6'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',4,4'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',3,4'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,4',6'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3',4',5'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',4,5,6'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3',4,5'-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,4,4',6'-Pentachlorobiphenyl	(5.0 µg/mL)
2',3,4,4',5'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',5,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,3',4',5,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4',5,5'-Heptachlorobiphenyl	(5.0 µg/mL)

PCB Congener Mix #5

M-1668A-5-0.01X

At stated conc. in Isooctane

1 x 1 mL

28 comps.

2-Chlorobiphenyl	(2.5 µg/mL)	2,2',3',4,6'-Pentachlorobiphenyl	(5.0 µg/mL)
4-Chlorobiphenyl	(2.5 µg/mL)	2',3,4,5,6'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2'-Dichlorobiphenyl	(2.5 µg/mL)	2,3,3',4',6'-Pentachlorobiphenyl	(5.0 µg/mL)
4,4'-Dichlorobiphenyl	(2.5 µg/mL)	3,3',4,4',5'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',6'-Trichlorobiphenyl	(2.5 µg/mL)	2,2',4,4',6,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3'-Trichlorobiphenyl	(2.5 µg/mL)	2,2',3,4,4',5'-Hexachlorobiphenyl	(5.0 µg/mL)
3,4,4'-Trichlorobiphenyl	(2.5 µg/mL)	3,3',4,4',5,5'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',6,6'-Tetrachlorobiphenyl	(5.0 µg/mL)	2,2',3,4',5,6,6'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,5-Tetrachlorobiphenyl	(5.0 µg/mL)	2,3,3',4,4',5,5'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,5'-Tetrachlorobiphenyl	(5.0 µg/mL)	2,2',3,3',5,5',6,6'-Octachlorobiphenyl	(7.5 µg/mL)
2,4,4',5-Tetrachlorobiphenyl	(5.0 µg/mL)	2,3,3',4,4',5,5',6'-Octachlorobiphenyl	(7.5 µg/mL)
2,3,3',4'-Tetrachlorobiphenyl	(5.0 µg/mL)	2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	(7.5 µg/mL)
3,3',4,4'-Tetrachlorobiphenyl	(5.0 µg/mL)	2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl	(7.5 µg/mL)
2,2',4,6,6'-Pentachlorobiphenyl	(5.0 µg/mL)	Decachlorobiphenyl	(7.5 µg/mL)

Method 1668A/1668 Combined Congener Standards

M-1668A-C-NT-LOC-WD

M-1668A-C-NT-LOC-WD-PAK

20 µg/mL each in Isooctane

SAVE

1 x 1 mL

5 x 1 mL

33 comps.

2-Chlorobiphenyl	2,2',4,4',6,6'-Hexachlorobiphenyl
4-Chlorobiphenyl	2,3,3',4,4',5'-Hexachlorobiphenyl
2,2'-Dichlorobiphenyl	2,3,3',4,4',5'-Hexachlorobiphenyl
4,4'-Dichlorobiphenyl	2,3',4,4',5,5'-Hexachlorobiphenyl
2,2',6'-Trichlorobiphenyl	3,3',4,4',5,5'-Hexachlorobiphenyl
2,3,5-Trichlorobiphenyl	2,2',3,3',4,4',5'-Heptachlorobiphenyl
2',3,5-Trichlorobiphenyl	2,2',3,4,4',5,5'-Heptachlorobiphenyl
3,4,4'-Trichlorobiphenyl	2,2',3,4,4',5,6'-Heptachlorobiphenyl
2,2',6,6'-Tetrachlorobiphenyl	2,2',3,4',5,5',6'-Heptachlorobiphenyl
3,3',4,4'-Tetrachlorobiphenyl	2,2',3,4',5,6,6'-Heptachlorobiphenyl
3,4,4',5'-Tetrachlorobiphenyl	2,3,3',4,4',5,5'-Heptachlorobiphenyl
2,2',4,6,6'-Pentachlorobiphenyl	2,2',3,3',5,5',6,6'-Octachlorobiphenyl
2,3,3',4,4'-Pentachlorobiphenyl	2,3,3',4,4',5,5',6'-Octachlorobiphenyl
2,3,4,4',5'-Pentachlorobiphenyl	2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl
2,3',4,4',5'-Pentachlorobiphenyl	2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl
2',3,4,4',5'-Pentachlorobiphenyl	2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
3,3',4,4',5'-Pentachlorobiphenyl	

GPC Calibration Solution

CLP-027-R2-WL-10ML

At stated conc. in CH₂Cl₂

1 x 10 mL

5 comps.

Corn Oil	(25 mg/mL)
bis(2-Ethylhexyl)phthalate	(0.5 mg/mL)
Methoxychlor	(0.1 mg/mL)
Perylene	(0.02 mg/mL)
Sulfur	(0.08 mg/mL)

Level of Chlorination Calibration/Spike Set

Determination of Chlorobiphenyl content at each level of chlorination

Calibration/Spike Set

M-1668A-LOC-SET

2 x 1 mL (M-1668A-NAT, M-1668A-PAR)

Native PCB Calibration Mix

M-1668A-NAT

At stated conc. in Isooctane

1 x 1 mL

19 comps.

4-Chlorobiphenyl	(5 µg/mL)
4,4'-Dichlorobiphenyl	(5 µg/mL)
2,4,4'-Trichlorobiphenyl	(5 µg/mL)
3,3',4,4'-Tetrachlorobiphenyl	(1 µg/mL)
2,3,3',4,4'-Pentachlorobiphenyl	(5 µg/mL)
2,3,4,4',5'-Pentachlorobiphenyl	(5 µg/mL)
2,3',4,4',5'-Pentachlorobiphenyl	(5 µg/mL)
2',3,4,4',5'-Pentachlorobiphenyl	(5 µg/mL)
3,3',4,4',5'-Pentachlorobiphenyl	(5 µg/mL)
2,3,3',4,4',5'-Hexachlorobiphenyl	(10 µg/mL)
2,3,3',4,4',5'-Hexachlorobiphenyl	(10 µg/mL)
2,3',4,4',5,5'-Hexachlorobiphenyl	(10 µg/mL)
3,3',4,4',5,5'-Hexachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5'-Heptachlorobiphenyl	(10 µg/mL)
2,2',3,4,4',5,5'-Heptachlorobiphenyl	(10 µg/mL)
2,3,3',4,4',5,5'-Heptachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5,5'-Octachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	(20 µg/mL)

PAR PCB Spike Mix

M-1668A-PAR

At stated conc. in Isooctane

1 x 1 mL

19 comps.

4-Chlorobiphenyl	(10 µg/mL)
4,4'-Dichlorobiphenyl	(10 µg/mL)
2,4,4'-Trichlorobiphenyl	(10 µg/mL)
3,3',4,4'-Tetrachlorobiphenyl	(0.2 µg/mL)
2,3,3',4,4'-Pentachlorobiphenyl	(10 µg/mL)
2,3,4,4',5'-Pentachlorobiphenyl	(10 µg/mL)
2,3',4,4',5'-Pentachlorobiphenyl	(10 µg/mL)
2',3,4,4',5'-Pentachlorobiphenyl	(10 µg/mL)
3,3',4,4',5'-Pentachlorobiphenyl	(1 µg/mL)
2,3,3',4,4',5'-Hexachlorobiphenyl	(10 µg/mL)
2,3,3',4,4',5'-Hexachlorobiphenyl	(10 µg/mL)
2,3',4,4',5,5'-Hexachlorobiphenyl	(10 µg/mL)
3,3',4,4',5,5'-Hexachlorobiphenyl	(2 µg/mL)
2,2',3,3',4,4',5'-Heptachlorobiphenyl	(2 µg/mL)
2,2',3,4,4',5,5'-Heptachlorobiphenyl	(10 µg/mL)
2,3,3',4,4',5,5'-Heptachlorobiphenyl	(2 µg/mL)
2,2',3,3',4,4',5,5'-Octachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	(20 µg/mL)

Congener Specific PCB Analysis



Canadian Methods

A second set of four formulations has been selected by the Institute for Biological Sciences of Canada and can be purchased individually or as a complete set (C-CAN-SET). The concentration levels for these formulations are selected so that 1 mL of standard diluted into 100 mL will show equal response by ECD.

PCB Congener (Canadian RM) Set

C-CAN-SET

4 x 1 mL (set includes C-CAN-01, C-CAN-02, C-CAN-03, C-CAN-04)

PCB Congeners Mix #1

C-CAN-01

1 x 1 mL

At stated conc. in Isooctane

14 comps.

No.	
18	2,2',5-Trichlorobiphenyl (11.8 µg/mL)
31	2,4',5-Trichlorobiphenyl (6.6 µg/mL)
40	2,2',3,3'-Tetrachlorobiphenyl (4.9 µg/mL)
44	2,2',3,5'-Tetrachlorobiphenyl (5.9 µg/mL)
49	2,2',4,5'-Tetrachlorobiphenyl (7.6 µg/mL)
54	2,2',6,6'-Tetrachlorobiphenyl (16.6 µg/mL)
77	3,3',4,4'-Tetrachlorobiphenyl (5.5 µg/mL)
86	2,2',3,4,5-Pentachlorobiphenyl (2.9 µg/mL)
87	2,2',3,4,5'-Pentachlorobiphenyl (3.8 µg/mL)
121	2,3',4,5',6-Pentachlorobiphenyl (3.1 µg/mL)
153	2,2',4,4',5,5'-Hexachlorobiphenyl (2.1 µg/mL)
156	2,3,3',4,4',5-Hexachlorobiphenyl (1.5 µg/mL)
159	2,3,3',4,5,5'-Hexachlorobiphenyl (1.2 µg/mL)
209	2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (1.7 µg/mL)

PCB Congeners Mix #2

C-CAN-02

1 x 1 mL

At stated conc. in Isooctane

15 comps.

No.	
15	4,4'-Dichlorobiphenyl (91.9 µg/mL)
52	2,2',5,5'-Tetrachlorobiphenyl (15.2 µg/mL)
60	2,3,4,4'-Tetrachlorobiphenyl (3.9 µg/mL)
103	2,2',4,5',6-Pentachlorobiphenyl (10.8 µg/mL)
105	2,3,3',4,4'-Pentachlorobiphenyl (4 µg/mL)
128	2,2',3,3',4,4'-Hexachlorobiphenyl (4.9 µg/mL)
143	2,2',3,4,5,6'-Hexachlorobiphenyl (5.7 µg/mL)
154	2,2',4,4',5,6'-Hexachlorobiphenyl (6.2 µg/mL)
173	2,2',3,3',4,5,6-Heptachlorobiphenyl (2.3 µg/mL)
182	2,2',3,4,4',5,6'-Heptachlorobiphenyl (3.8 µg/mL)
202	2,2',3,3',5,5',6,6'-Octachlorobiphenyl (3.6 µg/mL)
205	2,3,3',4,4',5,5',6-Octachlorobiphenyl (3.2 µg/mL)
207	2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (3.8 µg/mL)
208	2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (2.4 µg/mL)
209	2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (2.8 µg/mL)

PCB Congeners Mix #3

C-CAN-03

1 x 1 mL

At stated conc. in Isooctane

15 comps.

No.	
15	4,4'-Dichlorobiphenyl (138.1 µg/mL)
114	2,3,4,4',5-Pentachlorobiphenyl (6.3 µg/mL)
129	2,2',3,3',4,5-Hexachlorobiphenyl (8.3 µg/mL)
137	2,2',3,4,4',5-Hexachlorobiphenyl (7.4 µg/mL)
153	2,2',4,4',5,5'-Hexachlorobiphenyl (7.3 µg/mL)
171	2,2',3,3',4,4',6-Heptachlorobiphenyl (5.2 µg/mL)
183	2,2',3,4,4',5',6-Heptachlorobiphenyl (6.6 µg/mL)
185	2,2',3,4,5,5',6-Heptachlorobiphenyl (3.5 µg/mL)
189	2,3,3',4,4',5,5'-Heptachlorobiphenyl (4.7 µg/mL)
191	2,3,3',4,4',5',6-Heptachlorobiphenyl (5 µg/mL)
201	2,2',3,3',4,5',6,6'-Octachlorobiphenyl (7 µg/mL)
199	2,2',3,3',4,4',5,5',6-Octachlorobiphenyl (4.8 µg/mL)
203	2,2',3,4,4',5,5',6-Octachlorobiphenyl (5.1 µg/mL)
206	2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (6.7 µg/mL)
209	Decachlorobiphenyl (5.1 µg/mL)

PCB Congeners Mix #4

C-CAN-04

1 x 1 mL

At stated conc. in Isooctane

15 comps.

No.	
14	4,4'-Dichlorobiphenyl (76.7 µg/mL)
101	2,2',4,5,5'-Pentachlorobiphenyl (8.9 µg/mL)
118	2,3',4,4',5-Pentachlorobiphenyl (3.9 µg/mL)
138	2,2',3,4,4',5'-Hexachlorobiphenyl (4.2 µg/mL)
141	2,2',3,4,5,5'-Hexachlorobiphenyl (2.8 µg/mL)
151	2,2',3,5,5',6-Hexachlorobiphenyl (5 µg/mL)
153	2,2',4,4',5,5'-Hexachlorobiphenyl (3.3 µg/mL)
170	2,2',3,3',4,4',5-Heptachlorobiphenyl (3 µg/mL)
180	2,2',3,4,4',5,5'-Heptachlorobiphenyl (2.8 µg/mL)
187	2,2',3,4',5,5',6-Heptachlorobiphenyl (3.2 µg/mL)
194	2,2',3,3',4,4',5,5'-Octachlorobiphenyl (2.4 µg/mL)
195	2,2',3,3',4,4',5,6-Octachlorobiphenyl (2.6 µg/mL)
196	2,2',3,3',4,4',5,6'-Octachlorobiphenyl (3.3 µg/mL)
199	2,2',3,3',4,5,5',6'-Octachlorobiphenyl (3.6 µg/mL)
209	Decachlorobiphenyl (2.7 µg/mL)

Quebec Ministry of Environment Congener Mix

C-QME-01

1 x 1 mL

At stated conc. in Isooctane

41 comps.

No.		No.	
17	2,2',4-Trichlorobiphenyl (500 ng/mL)	149	2,2',3,4',5',6-Hexachlorobiphenyl (2000 ng/mL)
18	2,2',5-Trichlorobiphenyl (2000 ng/mL)	151	2,2',3,5,5',6-Hexachlorobiphenyl (2000 ng/mL)
28	2,4,4'-Trichlorobiphenyl (2000 ng/mL)	153	2,2',4,4',5,5'-Hexachlorobiphenyl (2000 ng/mL)
31	2,4',5-Trichlorobiphenyl (1500 ng/mL)	156	2,3,3',4,4',5-Hexachlorobiphenyl (2000 ng/mL)
33	2,3,4-Trichlorobiphenyl (2000 ng/mL)	158	2,3,3',4,4',6-Hexachlorobiphenyl (500 ng/mL)
44	2,2',3,5'-Tetrachlorobiphenyl (2000 ng/mL)	169	3,3',4,4',5,5'-Hexachlorobiphenyl (2000 ng/mL)
49	2,2',4,5'-Tetrachlorobiphenyl (2000 ng/mL)	170	2,2',3,3',4,4',5-Heptachlorobiphenyl (2000 ng/mL)
52	2,2',5,5'-Tetrachlorobiphenyl (2000 ng/mL)	171	2,2',3,3',4,4',6-Heptachlorobiphenyl (2000 ng/mL)
70	2,3',4',5-Tetrachlorobiphenyl (2000 ng/mL)	177	2,2',3,3',4',5,6-Heptachlorobiphenyl (2000 ng/mL)
74	2,4,4',5-Tetrachlorobiphenyl (2000 ng/mL)	180	2,2',3,4,4',5,5'-Heptachlorobiphenyl (2000 ng/mL)
82	2,2',3,3',4-Pentachlorobiphenyl (500 ng/mL)	183	2,2',3,4,4',5',6-Heptachlorobiphenyl (2000 ng/mL)
87	2,2',3,4,5-Pentachlorobiphenyl (2000 ng/mL)	187	2,2',3,4',5,5',6-Heptachlorobiphenyl (2000 ng/mL)
95	2,2',3,5',6-Pentachlorobiphenyl (1000 ng/mL)	191	2,3,3',4,4',5',6-Heptachlorobiphenyl (2000 ng/mL)
99	2,2',4,4',5-Pentachlorobiphenyl (2000 ng/mL)	194	2,2',3,3',4,4',5,5'-Octachlorobiphenyl (2000 ng/mL)
101	2,2',4,5,5'-Pentachlorobiphenyl (2000 ng/mL)	195	2,2',3,3',4,4',5,6-Octachlorobiphenyl (2000 ng/mL)
105	2,3,3',4,4'-Pentachlorobiphenyl (500 ng/mL)	199	2,2',3,3',4,5,5',6'-Octachlorobiphenyl (1500 ng/mL)
110	2,3,3',4',6-Pentachlorobiphenyl (2000 ng/mL)	205	2,3,3',4,4',5,5',6-Octachlorobiphenyl (2000 ng/mL)
118	2,3',4,4',5-Pentachlorobiphenyl (2000 ng/mL)	206	2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (2000 ng/mL)
128	2,2',3,3',4,4'-Hexachlorobiphenyl (2000 ng/mL)	208	2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl (2000 ng/mL)
132	2,2',3,3',4,6'-Hexachlorobiphenyl (1000 ng/mL)	209	Decachlorobiphenyl (2000 ng/mL)
138	2,2',3,4,4',5'-Hexachlorobiphenyl (2000 ng/mL)		



Congener Specific PCB Analysis

Integrated Atmospheric Deposition Network (IADN)

The Integrated Atmospheric Deposition Network is composed of five agencies: the US EPA, Environment Canada's (EC) Metrological Service of Canada, EC's National Water Research Institute (NWRI), EC's Ecosystem Health Division of Ontario Region (EHD), and the Ontario Ministry of Environment (OME) whose goal it is to cooperatively implement the Great Lakes Water Quality Agreement.

This agreement requires certain chemicals to be monitored. The Tier 1 group specifically called for the measurement of PCB congeners. AccuStandard was requested to develop a set of IADN PCB congener standards to meet this specific chemical list.

IADN Congener Set

C-IADN-SET

3 x 1 mL (C-IADN-01, C-IADN-02, C-IADN-03)

IADN Congener Standard #1

C-IADN-01

1 x 1 mL

30 µg/mL each in Isooctane

28 comps.

2,2'-Dichlorobiphenyl
2,4-Dichlorobiphenyl
2,6-Dichlorobiphenyl
4,4'-Dichlorobiphenyl
2,2',5-Trichlorobiphenyl
2,4,4'-Trichlorobiphenyl
2,4',6-Trichlorobiphenyl
2,2',3,4-Tetrachlorobiphenyl
2,2',3,6-Tetrachlorobiphenyl
2,2',5,5'-Tetrachlorobiphenyl
2,3,3',4'-Tetrachlorobiphenyl
2,3',4,4'-Tetrachlorobiphenyl
2,4,4',5-Tetrachlorobiphenyl
3,4,4',5-Tetrachlorobiphenyl
2,2',3,4,4'-Pentachlorobiphenyl
2,2',3,4',6-Pentachlorobiphenyl
2,2',3',4,5-Pentachlorobiphenyl
2,2',4,5,5'-Pentachlorobiphenyl
2,3,4,4',5-Pentachlorobiphenyl
2',3,4,4',5-Pentachlorobiphenyl
2,2',3,3',4,6-Hexachlorobiphenyl
2,2',3,4,4',5-Hexachlorobiphenyl
2,2',4,4',5,5'-Hexachlorobiphenyl
2,3',4,4',5,5'-Hexachlorobiphenyl
2,2',3,3',4,4',6-Heptachlorobiphenyl
2,2',3,4,4',5,5'-Heptachlorobiphenyl
2,2',3,3',4,5,6-Octachlorobiphenyl
2,3,3',4,4',5,5',6-Octachlorobiphenyl

IADN Congener Standard #2

C-IADN-02

1 x 1 mL

30 µg/mL each in Isooctane

28 comps.

2,3-Dichlorobiphenyl
2,4'-Dichlorobiphenyl
3,4-Dichlorobiphenyl
2,2',3-Trichlorobiphenyl
2,2',6-Trichlorobiphenyl
2,3',5-Trichlorobiphenyl
2',3,4-Trichlorobiphenyl
2,2',3,4'-Tetrachlorobiphenyl
2,2',4,4'-Tetrachlorobiphenyl
2,2',4,5'-Tetrachlorobiphenyl
2,3,4,4'-Tetrachlorobiphenyl
2,3',4',5-Tetrachlorobiphenyl
2',3,4,5-Tetrachlorobiphenyl
2,2',3,3',5-Pentachlorobiphenyl
2,2',3,4,5'-Pentachlorobiphenyl
2,2',3,5,5'-Pentachlorobiphenyl
2,2',4,4',5-Pentachlorobiphenyl
2,3,3',4,4'-Pentachlorobiphenyl
2,3',4,4',5-Pentachlorobiphenyl
3,3',4,4',5-Pentachlorobiphenyl
2,2',3,3',4,6-Hexachlorobiphenyl
2,2',3,3',4,6'-Hexachlorobiphenyl
2,2',3,4,5,6-Hexachlorobiphenyl
2,3,3',4,4',5-Hexachlorobiphenyl
3,3',4,4',5,5'-Hexachlorobiphenyl
2,2',3,3',4,5,5'-Heptachlorobiphenyl
2,3,3',4,4',5,6-Heptachlorobiphenyl
2,2',3,3',4,5,5',6-Octachlorobiphenyl
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl

IADN Congener Standard #3

C-IADN-03

1 x 1 mL

30 µg/mL each in Isooctane

28 comps.

2,3'-Dichlorobiphenyl
2,5-Dichlorobiphenyl
3,4'-Dichlorobiphenyl
2,2',4-Trichlorobiphenyl
2,3,4'-Trichlorobiphenyl
2,4',5-Trichlorobiphenyl
3,4,4'-Trichlorobiphenyl
2,2',3,5'-Tetrachlorobiphenyl
2,2',4,5-Tetrachlorobiphenyl
2,2',5,6'-Tetrachlorobiphenyl
2,3,4',6-Tetrachlorobiphenyl
2,3',4,6-Tetrachlorobiphenyl
3,3',4,4'-Tetrachlorobiphenyl
2,2',3,3',6-Pentachlorobiphenyl
2,2',3,5',6-Pentachlorobiphenyl
2,2',4,4',6-Pentachlorobiphenyl
2,3,3',4',6-Pentachlorobiphenyl
2,3',4,4',6-Pentachlorobiphenyl
2,2',3,3',4,4'-Hexachlorobiphenyl
2,2',3,3',5,6'-Hexachlorobiphenyl
2,2',3,4',5,6-Hexachlorobiphenyl
2,2',3,3',4,4',5-Heptachlorobiphenyl
2,2',3,3',4,5,6'-Heptachlorobiphenyl
2,2',3,3',4,4',5,5'-Octachlorobiphenyl
2,2',3,3',5,5',6,6'-Octachlorobiphenyl
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl

PCB Congener Content Evaluation

These Congener Calibration mixes have been formulated to meet the proposed International standard titled "Insulating Liquids - Contamination by PCBs - Method of Determination by Capillary Column Gas Chromatography".

Mix #1

AE-00059

1 x 1 mL

AE-00059-10ML

1 x 10 mL

10 µg/mL each in Isooctane

6 comps.

No.
28 2,4,4'-Trichlorobiphenyl
52 2,2',5,5'-Tetrachlorobiphenyl
101 2,2',4,5,5'-Pentachlorobiphenyl
138 2,2',3,4,4',5'-Hexachlorobiphenyl
153 2,2',4,4',5,5'-Hexachlorobiphenyl
180 2,2',3,4,4',5,5'-Heptachlorobiphenyl

Mix #2

AE-00060

1 x 1 mL

AE-00060-10ML

1 x 10 mL

10 µg/mL each in Isooctane

3 comps.

No.
77 3,3',4,4'-Tetrachlorobiphenyl
126 3,3',4,4',5-Pentachlorobiphenyl
169 3,3',4,4',5,5'-Hexachlorobiphenyl

Congener Calibration Mix

AE-00061

1 x 1 mL

AE-00061-10ML

1 x 10 mL

10 µg/mL each in Isooctane

14 comps.

No.
18 2,2',5-Trichlorobiphenyl
28 2,4,4'-Trichlorobiphenyl
31 2,4',5-Trichlorobiphenyl
44 2,2',3,5'-Tetrachlorobiphenyl
52 2,2',5,5'-Tetrachlorobiphenyl
101 2,2',4,5,5'-Pentachlorobiphenyl
118 2,3',4,4',5-Pentachlorobiphenyl
138 2,2',3,4,4',5'-Hexachlorobiphenyl
149 2,2',3,4',5,6-Hexachlorobiphenyl
153 2,2',4,4',5,5'-Hexachlorobiphenyl
170 2,2',3,3',4,4',5-Heptachlorobiphenyl
180 2,2',3,4,4',5,5'-Heptachlorobiphenyl
194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl
209 Decachlorobiphenyl

Internal Standards

Each at 100 µg/mL in Isooctane

C-030S-TP

1 x 1 mL

2,4,6-Trichlorobiphenyl

C-209S-TP

1 x 1 mL

2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl

Technical Note

These congener content evaluation mixtures have proven useful for European laboratories estimating the PCB content of a sample when following EU guideline 96/59/EU for cleanup of PCBs.



Formulations for Toxicity and Abundance Studies

Abundance Analysis

Five of the solutions AccuStandard offers are formulated to assist the investigator or analytical chemist in their own studies and can be purchased individually or as a complete set (C-SCA-SET). According to the study the 36 congeners contained in these five groups are considered environmentally threatening due to their frequency of occurrence in environmental samples, abundance in the Aroclors and potential toxicity.

Group 1a: comprises the three congeners present to a small extent in the Aroclors that are the most toxic and have been characterized as pure 3-Methyl cholanthrene - type (3-MC) inducers.

Group 1b: congeners are mixed-type inducers but are of somewhat lesser toxicity and are very abundant in the Aroclors as well as in the environment. It includes Congener #105 which, while not as prevalent, is potentially almost as toxic as the Group 1a congeners.

Group 2: includes the congeners which are Phenobarbital - type (PB) inducers for Mixed-Function Oxidase enzymes. These are less toxic but more abundant in the environment. They represent 25-41% of total PCB content found in animal tissue.

Group 3: congeners are weak- or non-inducers representing about 10% of the PCB content of tissues.

Group 4: congeners have some potential for toxicity but have very low presence in tissue.

Toxicity Analysis

A sixth solution is prepared for the analyst who is investigating the presence of PCB congeners in food and human tissues. Specific congeners are selected by K.C. Jones² as outlined in his article referenced below which is titled, "Determination of polychlorinated biphenyls in human food stuffs and tissues: Suggestions for a selective congener analytical approach".

Literature Reference

V.A. McFarland and J.U. Clarke, Environmental Health Perspectives, vol. 81, pp 225-239 (1989). 2. K.C. Jones, Sci. Total Environment, vol. 68, pp 141-159 (1988).

Complete Set of PCB Congeners

C-SCA-SET

5 x 1 mL (includes C-SCA-01, C-SCA-02, C-SCA-03, C-SCA-04, C-SCA-05)

Mix #1 Group 1a (3 MC Type Inducers)

C-SCA-01

10 µg/mL each in Isooctane

1 x 1 mL

3 comps.

3,3',4,4'-Tetrachlorobiphenyl (77) 3,3',4,4',5,5'-Hexachlorobiphenyl (169)
3,3',4,4',5-Pentachlorobiphenyl (126)

Mix #2 Group 1b (Mixed Type Inducers)

C-SCA-02

10 µg/mL each in Isooctane

1 x 1 mL

6 comps.

2,3,3',4,4'-Pentachlorobiphenyl (105) 2,2',3,4,4',5'-Hexachlorobiphenyl (138)
2,3',4,4',5-Pentachlorobiphenyl (118) 2,3,3',4,4',5'-Hexachlorobiphenyl (156)
2,2',3,3',4,4'-Hexachlorobiphenyl (128) 2,2',3,3',4,4',5'-Heptachlorobiphenyl (170)

Mix #3 Group 2 (PB Type Inducers)

C-SCA-03

10 µg/mL each in Isooctane

1 x 1 mL

7 comps.

2,2',3,4,5'-Pentachlorobiphenyl (87) 2,2',3,4,4',5'-Heptachlorobiphenyl (180)
2,2',4,4',5-Pentachlorobiphenyl (99) 2,2',3,4,4',5',6'-Heptachlorobiphenyl (183)
2,2',4,5,5'-Pentachlorobiphenyl (101) 2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)
2,2',4,4',5,5'-Hexachlorobiphenyl (153)

Mix #4 Group 3 (Non-Inducer Type)

C-SCA-04

10 µg/mL each in Isooctane

1 x 1 mL

10 comps.

2,2',5-Trichlorobiphenyl (18) 2,4,4',5-Tetrachlorobiphenyl (74)
2,2',3,5'-Tetrachlorobiphenyl (44) 2,2',3,5,5',6'-Hexachlorobiphenyl (151)
2,2',4,5'-Tetrachlorobiphenyl (49) 2,2',3,3',4',5,6'-Heptachlorobiphenyl (177)
2,2',5,5'-Tetrachlorobiphenyl (52) 2,2',3,4',5,5',6'-Heptachlorobiphenyl (187)
2,3',4',5-Tetrachlorobiphenyl (70) 2,2',3,3',4,5,5',6'-Octachlorobiphenyl (199)

Mix #5 Group 4

(Mixed Type Inducers present at very low levels)

C-SCA-05

10 µg/mL each in Isooctane

1 x 1 mL

10 comps.

3,4,4'-Trichlorobiphenyl (37) 2,3,3',4,4',5'-Hexachlorobiphenyl (157)
3,4,4',5-Tetrachlorobiphenyl (81) 2,3,3',4,4',6'-Hexachlorobiphenyl (157)
2,3,4,4',5-Pentachlorobiphenyl (114) 2,3',4,4',5,5'-Hexachlorobiphenyl (167)
2,3',4,4',6-Pentachlorobiphenyl (119) 2,3',4,4',5,6'-Hexachlorobiphenyl (168)
2',3,4,4',5-Pentachlorobiphenyl (123) 2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)

Mix #6 (Food & Human Tissue analysis)

C-SCA-06

10 µg/mL each in Isooctane

1 x 1 mL

32 comps.

2,4'-Dichlorobiphenyl (8) 2,3,4,4',5-Pentachlorobiphenyl (114)
2,4,4'-Trichlorobiphenyl (28) 2,3',4,4',5-Pentachlorobiphenyl (118)
3,4,4'-Trichlorobiphenyl (37) 3,3',4,4',5-Pentachlorobiphenyl (126)
2,2',3,5'-Tetrachlorobiphenyl (44) 2,2',3,3',4,4'-Hexachlorobiphenyl (128)
2,2',4,5'-Tetrachlorobiphenyl (49) 2,2',3,4,4',5'-Hexachlorobiphenyl (138)
2,2',5,5'-Tetrachlorobiphenyl (52) 2,2',4,4',5,5'-Hexachlorobiphenyl (153)
2,3,4,4'-Tetrachlorobiphenyl (60) 2,3,3',4,4',5'-Hexachlorobiphenyl (156)
2,3',4,4'-Tetrachlorobiphenyl (66) 2,3,3',4,4',6'-Hexachlorobiphenyl (158)
2,3',4',5-Tetrachlorobiphenyl (70) 2,3,4,4',5,6'-Hexachlorobiphenyl (166)
2,4,4',5-Tetrachlorobiphenyl (74) 3,3',4,4',5,5'-Hexachlorobiphenyl (169)
3,3',4,4'-Tetrachlorobiphenyl (77) 2,2',3,3',4,4',5'-Heptachlorobiphenyl (170)
2,2',3,3',4-Pentachlorobiphenyl (82) 2,2',3,3',5,6,6'-Heptachlorobiphenyl (179)
2,2',3,4,5'-Pentachlorobiphenyl (87) 2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)
2,2',4,4',5-Pentachlorobiphenyl (99) 2,2',3,4,4',5,6'-Heptachlorobiphenyl (183)
2,2',4,5,5'-Pentachlorobiphenyl (101) 2,2',3,4',5,5',6'-Heptachlorobiphenyl (187)
2,3,3',4,4'-Pentachlorobiphenyl (105) 2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)

Non-Ortho Substituted PCBs

C-SCA-DIOXLIK

10 µg/mL each in Isooctane

1 x 1 mL

4 comps.

3,3',4,4'-Tetrachlorobiphenyl (77)
3,3',4,4',5-Pentachlorobiphenyl (126)
3,3',4,4',5,5'-Hexachlorobiphenyl (169)
3,4,4',5-Tetrachlorobiphenyl (81)

Internal Standard

C-EU-IS-10ML

At stated conc. in Isooctane

1 x 10 mL

2 comps.

2,4,6-Trichlorobiphenyl
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl

Dutch Seven PCBs Standard

PCB-DUTCH7-SET

100 µg/mL each in Isooctane

7 x 1 mL

PCB-DUTCH7

10 µg/mL each in Isooctane

1 x 1 mL

7 comps.

2,4,4'-Trichlorobiphenyl
2,2',5,5'-Tetrachlorobiphenyl
2,2',4,5,5'-Pentachlorobiphenyl
2,3',4,4',5-Pentachlorobiphenyl
2,2',3,4,4',5'-Hexachlorobiphenyl
2,2',4,4',5,5'-Hexachlorobiphenyl
2,2',3,4,4',5,5'-Heptachlorobiphenyl



Congener Specific PCB Analysis

PCB Congener Mix for West Coast Fish Studies

C-WCFS

25 µg/mL each in Isooctane

1 x 1 mL

24 comps.

2,4',5'-Trichlorobiphenyl	2,2',3,4,5,5'-Hexachlorobiphenyl
2',3,4'-Trichlorobiphenyl	2,2',3,4',5',6'-Hexachlorobiphenyl
2,2',4,5'-Tetrachlorobiphenyl	2,2',3,5,5',6'-Hexachlorobiphenyl
2,3,3',4'-Tetrachlorobiphenyl	2,3,3',4,4',5'-Hexachlorobiphenyl
2,3,4,4'-Tetrachlorobiphenyl	2,3,3',4,4',6'-Hexachlorobiphenyl
2,3',4,5'-Tetrachlorobiphenyl	2,2',3,3',4,5,6'-Heptachlorobiphenyl
2,2',3,4,5'-Pentachlorobiphenyl	2,2',3,3',4',5,6'-Heptachlorobiphenyl
2,2',3,5',6'-Pentachlorobiphenyl	2,2',3,3',4,4',5,5'-Octachlorobiphenyl
2,2',3',4,5'-Pentachlorobiphenyl	2,2',3,3',4,5,5',6'-Octachlorobiphenyl
2,2',4,4',5'-Pentachlorobiphenyl	2,2',3,4,4',5,5',6'-Octachlorobiphenyl
2,3,3',4',6'-Pentachlorobiphenyl	2,2',3,4,4',5',6'-Heptachlorobiphenyl
2,2',3,3',4,6'-Hexachlorobiphenyl	2,4,4',5'-Tetrachlorobiphenyl

WHO/NIST/NOAA Congener List

C-WNN

C-WNN-PAK

10 µg/mL each in Isooctane

SAVE

1 x 1 mL

5 x 1 mL

28 comps.

2,4'-Dichlorobiphenyl	2,2',3,3',4,4'-Hexachlorobiphenyl
2,2',5'-Trichlorobiphenyl	2,2',3,4,4',5'-Hexachlorobiphenyl
2,4,4'-Trichlorobiphenyl	2,2',4,4',5,5'-Hexachlorobiphenyl
2,2',3,5'-Tetrachlorobiphenyl	2,3,3',4,4',5'-Hexachlorobiphenyl
2,2',5,5'-Tetrachlorobiphenyl	2,3,3',4,4',5'-Hexachlorobiphenyl
2,3',4,4'-Tetrachlorobiphenyl	2,3',4,4',5,5'-Hexachlorobiphenyl
3,3',4,4'-Tetrachlorobiphenyl	3,3',4,4',5,5'-Hexachlorobiphenyl
3,4,4',5'-Tetrachlorobiphenyl	2,2',3,3',4,4',5'-Heptachlorobiphenyl
2,2',4,5,5'-Pentachlorobiphenyl	2,2',3,4,4',5,5'-Heptachlorobiphenyl
2,3,3',4,4'-Pentachlorobiphenyl	2,2',3,4',5,5',6'-Heptachlorobiphenyl
2,3,4,4',5'-Pentachlorobiphenyl	2,3,3',4,4',5,5'-Heptachlorobiphenyl
2,3',4,4',5'-Pentachlorobiphenyl	2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl
2',3,4,4',5'-Pentachlorobiphenyl	Decachlorobiphenyl

World Health Organization Congener Mix

C-WHO-01

2.0 µg/mL each in Isooctane

1 x 1 mL

12 comps.

3,3',4,4'-Tetrachlorobiphenyl	2,3',4,4',5'-Pentachlorobiphenyl	2,3,3',4,4',5'-Hexachlorobiphenyl
3,4,4',5'-Tetrachlorobiphenyl	2',3,4,4',5'-Pentachlorobiphenyl	2,3',4,4',5,5'-Hexachlorobiphenyl
2,3,3',4,4'-Pentachlorobiphenyl	3,3',4,4',5'-Pentachlorobiphenyl	3,3',4,4',5,5'-Hexachlorobiphenyl
2,3,4,4',5'-Pentachlorobiphenyl	2,3,3',4,4',5'-Hexachlorobiphenyl	2,3,3',4,4',5,5'-Heptachlorobiphenyl

DCMA-PCB Isomer Mixture

M-002

M-002-PAK

At stated conc. in Hexane

SAVE

1 x 1 mL

5 x 1 mL

10 comps.

2-Chlorobiphenyl	(100 µg/mL)	2,2',3,3',6,6'-Hexachlorobiphenyl	(10 µg/mL)
3,3'-Dichlorobiphenyl	(100 µg/mL)	2,2',3,4,5,5',6'-Heptachlorobiphenyl	(5 µg/mL)
2,4,5-Trichlorobiphenyl	(10 µg/mL)	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	(5 µg/mL)
2,2',4,4'-Tetrachlorobiphenyl	(10 µg/mL)	2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl	(5 µg/mL)
2,3',4,5',6'-Pentachlorobiphenyl	(10 µg/mL)	2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	(5 µg/mL)

Technical Note

The Dry Color Manufacturer's Association (DCMA) recommends that its members use this type of mixture to monitor their process streams for PCBs. The DCMA-PCB congener method is made from pure PCB congeners in Hexane

CEN's Workgroup #22 for PCBs in Waste Oil

PCB-W22

10 µg/mL each in Isooctane

PCB-W22-PAK

SAVE

1 x 1 mL

15 comps.

5 x 1 mL

PCB-W22-SET

100 µg/mL in Isooctane

15 x 1 mL

(Set of Individual Solutions)

No.		No.		No.	
(18)	2,2',5'-Trichlorobiphenyl	(52)	2,2',5,5'-Tetrachlorobiphenyl	(149)	2,2',3,4',5',6'-Hexachlorobiphenyl
(20)	2,3,3'-Trichlorobiphenyl	(101)	2,2',4,5,5'-Pentachlorobiphenyl	(153)	2,2',4,4',5,5'-Hexachlorobiphenyl
(28)	2,4,4'-Trichlorobiphenyl	(105)	2,3,3',4,4'-Pentachlorobiphenyl	(170)	2,2',3,3',4,4',5'-Heptachlorobiphenyl
(31)	2,4',5'-Trichlorobiphenyl	(118)	2,3',4,4',5'-Pentachlorobiphenyl	(180)	2,2',3,4,4',5,5'-Heptachlorobiphenyl
(44)	2,2',3,5'-Tetrachlorobiphenyl	(138)	2,2',3,4,4',5'-Hexachlorobiphenyl	(194)	2,2',3,3',4,4',5,5'-Octachlorobiphenyl

Technical Note

The Comité Européen de Normalisation (CEN) has assigned Workgroup Number 22 in Hamburg, Germany to develop a method for "PCBs" in waste oil.

Dioxin-Like Congeners

C-DIOXLIK	Level 1 -01 ng/mL	Level 2 -02 ng/mL	Level 3 -03 ng/mL	Level 4 -04 ng/mL	Level 5 -05 ng/mL	Level 6 -06 ng/mL	Level 7 -07 ng/mL	Level 8 -08 ng/mL	Level 9 -09 ng/mL	Level 10 -10 ng/mL	Level 11 -11 ng/mL	Level 12 -12 ng/mL
3,3',4,4'-Tetrachlorobiphenyl (77)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
3,4,4',5'-Tetrachlorobiphenyl (81)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
2,3,3',4,4'-Pentachlorobiphenyl (105)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
2,3,4,4',5'-Pentachlorobiphenyl (114)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
2,3',4,4',5'-Pentachlorobiphenyl (118)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
2',3,4,4',5'-Pentachlorobiphenyl (123)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
3,3',4,4',5'-Pentachlorobiphenyl (126)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
2,3,3',4,4',5'-Hexachlorobiphenyl (156)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
2,3,3',4,4',5'-Hexachlorobiphenyl (157)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
2,3',4,4',5,5'-Hexachlorobiphenyl (167)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
2,2',3,3',4,4',5'-Heptachlorobiphenyl (170)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	0.05	0.1	0.2	0.5	1	2	5	10	20	50	100	250

C-DIOXLIK1-SET

5 x 1 mL

Set includes

C-DIOXLIK-02	C-DIOXLIK-08
C-DIOXLIK-04	C-DIOXLIK-10
C-DIOXLIK-06	

C-DIOXLIK2-SET

5 x 1 mL

Set includes

C-DIOXLIK-03	C-DIOXLIK-09
C-DIOXLIK-05	C-DIOXLIK-11
C-DIOXLIK-07	

C-DIOXLIK3-SET

5 x 1 mL

Set includes

C-DIOXLIK-04	C-DIOXLIK-10
C-DIOXLIK-06	C-DIOXLIK-12
C-DIOXLIK-08	

Individual Levels 4, 6, 8, 10 12

C-DIOXLIK3-04	1 mL
C-DIOXLIK3-06	1 mL
C-DIOXLIK3-08	1 mL
C-DIOXLIK3-10	1 mL
C-DIOXLIK3-12	1 mL

PCB Congener Calibration Mixtures



**9 Mixtures provide All 209 Congeners
Present in Aroclors**

PCB Congener Mix #1

C-CS-01 1 x 1 mL
10 µg/mL each in Isooctane 39 comps.

No.	
1	2-Chlorobiphenyl
2	3-Chlorobiphenyl †
3	4-Chlorobiphenyl
4	2,2'-Dichlorobiphenyl
6	2,3'-Dichlorobiphenyl
8	2,4'-Dichlorobiphenyl
9	2,5-Dichlorobiphenyl
16	2,2',3-Trichlorobiphenyl
18	2,2',5-Trichlorobiphenyl
19	2,2',6-Trichlorobiphenyl
22	2,3,4'-Trichlorobiphenyl
25	2,3',4-Trichlorobiphenyl
28	2,4,4'-Trichlorobiphenyl
44	2,2',3,5'-Tetrachlorobiphenyl
52	2,2',5,5'-Tetrachlorobiphenyl
56	2,3,3',4'-Tetrachlorobiphenyl
66	2,3',4,4'-Tetrachlorobiphenyl
67	2,3',4,5-Tetrachlorobiphenyl
71	2,3',4',6-Tetrachlorobiphenyl
74	2,4,4',5-Tetrachlorobiphenyl
82	2,2',3,3',4-Pentachlorobiphenyl
87	2,2',3,4,5'-Pentachlorobiphenyl
99	2,2',4,4',5-Pentachlorobiphenyl
110	2,3,3',4',6-Pentachlorobiphenyl
138	2,2',3,4,4',5'-Hexachlorobiphenyl
146	2,2',3,4',5,5'-Hexachlorobiphenyl
147	2,2',3,4',5,6-Hexachlorobiphenyl †
153	2,2',4,4',5,5'-Hexachlorobiphenyl
173	2,2',3,3',4,5,6-Heptachlorobiphenyl
174	2,2',3,3',4,5,6'-Heptachlorobiphenyl
177	2,2',3,3',4',5,6-Heptachlorobiphenyl
179	2,2',3,3',5,6,6'-Heptachlorobiphenyl
180	2,2',3,4,4',5,5'-Heptachlorobiphenyl
187	2,2',3,4',5,5',6-Heptachlorobiphenyl
194	2,2',3,3',4,4',5,5'-Octachlorobiphenyl
195	2,2',3,3',4,4',5,6-Octachlorobiphenyl
199	2,2',3,3',4,4',5,6'-Octachlorobiphenyl
203	2,2',3,4,4',5,5',6-Octachlorobiphenyl
206	2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl

PCB Congener Mix #4

C-CS-04 1 x 1 mL
10 µg/mL each in Isooctane 22 comps.

No.	
13	3,4'-Dichlorobiphenyl
14	3,5-Dichlorobiphenyl †
35	3,3',4-Trichlorobiphenyl
51	2,2',4,6'-Tetrachlorobiphenyl
53	2,2',5,6'-Tetrachlorobiphenyl
54	2,2',6,6'-Tetrachlorobiphenyl †
73	2,3',5',6-Tetrachlorobiphenyl †
75	2,4,4',6-Tetrachlorobiphenyl
81	3,4,4',5-Tetrachlorobiphenyl †
90	2,2',3,4',5-Pentachlorobiphenyl †
100	2,2',4,4',6-Pentachlorobiphenyl †
117	2,3,4',5,6-Pentachlorobiphenyl
122	2',3,3',4,5-Pentachlorobiphenyl
124	2',3,4,5,5'-Pentachlorobiphenyl
130	2,2',3,3',4,5'-Hexachlorobiphenyl
154	2,2',4,4',5,6'-Hexachlorobiphenyl †
163	2,3,3',4',5,6-Hexachlorobiphenyl
165	2,3,3',5,5',6-Hexachlorobiphenyl †
175	2,2',3,3',4,5',6-Heptachlorobiphenyl
200	2,2',3,3',4,5,6,6'-Octachlorobiphenyl
201	2,2',3,3',4,5',6,6'-Octachlorobiphenyl
202	2,2',3,3',5,5',6,6'-Octachlorobiphenyl

PCB Congener Mix #2

C-CS-02 1 x 1 mL
10 µg/mL each in Isooctane 36 comps.

No.	
5	2,3-Dichlorobiphenyl
7	2,4-Dichlorobiphenyl
10	2,6-Dichlorobiphenyl
17	2,2',4-Trichlorobiphenyl
24	2,3,6-Trichlorobiphenyl
26	2,3',5-Trichlorobiphenyl
31	2,4',5-Trichlorobiphenyl
32	2,4',6-Trichlorobiphenyl
37	3,4,4'-Trichlorobiphenyl
41	2,2',3,4-Tetrachlorobiphenyl
45	2,2',3,6-Tetrachlorobiphenyl
46	2,2',3,6'-Tetrachlorobiphenyl
48	2,2',4,5-Tetrachlorobiphenyl
60	2,3,4,4'-Tetrachlorobiphenyl
70	2,3',4',5-Tetrachlorobiphenyl
83	2,2',3,3',5-Pentachlorobiphenyl
84	2,2',3,3',6-Pentachlorobiphenyl
95	2,2',3,5',6-Pentachlorobiphenyl
103	2,2',4,5',6-Pentachlorobiphenyl †
107	2,3,3',4',5-Pentachlorobiphenyl
115	2,3,4,4',6-Pentachlorobiphenyl
131	2,2',3,3',4,6-Hexachlorobiphenyl
132	2,2',3,3',4,6'-Hexachlorobiphenyl
135	2,2',3,3',5,6'-Hexachlorobiphenyl
141	2,2',3,4,5,5'-Hexachlorobiphenyl
149	2,2',3,4',5,6-Hexachlorobiphenyl
164	2,3,3',4',5',6-Hexachlorobiphenyl
170	2,2',3,3',4,4',5-Heptachlorobiphenyl
171	2,2',3,3',4,4',6-Heptachlorobiphenyl
172	2,2',3,3',4,5,5'-Heptachlorobiphenyl
178	2,2',3,3',5,5',6-Heptachlorobiphenyl
183	2,2',3,4,4',5',6-Heptachlorobiphenyl
193	2,3,3',4',5,5',6-Heptachlorobiphenyl
196	2,2',3,3',4,4',5',6-Octachlorobiphenyl
197	2,2',3,3',4,4',6,6'-Octachlorobiphenyl
205	2,3,3',4,4',5,5',6-Octachlorobiphenyl

PCB Congener Mix #5

C-CS-05 1 x 1 mL
10 µg/mL each in Isooctane 20 comps.

No.	
12	3,4-Dichlorobiphenyl
33	2',3,4-Trichlorobiphenyl
49	2,2',4,5'-Tetrachlorobiphenyl
59	2,3,3',6-Tetrachlorobiphenyl
63	2,3,4',5-Tetrachlorobiphenyl
64	2,3,4',6-Tetrachlorobiphenyl
77	3,3',4,4'-Tetrachlorobiphenyl
85	2,2',3,4,4'-Pentachlorobiphenyl
91	2,2',3,4',6-Pentachlorobiphenyl
97	2,2',3',4,5-Pentachlorobiphenyl
104	2,2',4,6,6'-Pentachlorobiphenyl †
114	2,3,4,4',5-Pentachlorobiphenyl
123	2',3,4,4',5-Pentachlorobiphenyl
129	2,2',3,3',4,5-Hexachlorobiphenyl
137	2,2',3,4,4',5-Hexachlorobiphenyl
156	2,3,3',4,4',5-Hexachlorobiphenyl
167	2,3',4,4',5,5'-Hexachlorobiphenyl
176	2,2',3,3',4,6,6'-Heptachlorobiphenyl
185	2,2',3,4,5,5',6-Heptachlorobiphenyl
189	2,3,3',4,4',5,5'-Heptachlorobiphenyl

PCB Congener Mix #3

C-CS-03 1 x 1 mL
10 µg/mL each in Isooctane 27 comps.

No.	
15	4,4'-Dichlorobiphenyl
20	2,3,3'-Trichlorobiphenyl
27	2,3',6-Trichlorobiphenyl
29	2,4,5-Trichlorobiphenyl
34	2',3,5-Trichlorobiphenyl
40	2,2',3,3'-Tetrachlorobiphenyl
42	2,2',3,4'-Tetrachlorobiphenyl
47	2,2',4,4'-Tetrachlorobiphenyl
69	2,3',4,6-Tetrachlorobiphenyl †
92	2,2',3,5,5'-Pentachlorobiphenyl
93	2,2',3,5,6-Pentachlorobiphenyl †
101	2,2',4,5,5'-Pentachlorobiphenyl
105	2,3,3',4,4'-Pentachlorobiphenyl
118	2,3',4,4',5-Pentachlorobiphenyl
119	2,3',4,4',6-Pentachlorobiphenyl
128	2,2',3,3',4,4'-Hexachlorobiphenyl
134	2,2',3,3',5,6-Hexachlorobiphenyl
136	2,2',3,3',6,6'-Hexachlorobiphenyl
144	2,2',3,4,5',6-Hexachlorobiphenyl
151	2,2',3,5,5',6-Hexachlorobiphenyl
157	2,3,3',4,4',5'-Hexachlorobiphenyl
158	2,3,3',4,4',6-Hexachlorobiphenyl
190	2,3,3',4,4',5,6-Heptachlorobiphenyl
191	2,3,3',4,4',5',6-Heptachlorobiphenyl
207	2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl †
208	2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl
209	2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl †

Reference Key

non-Bold = Congener in any of
Aroclors 1242, 1254 or
1260 @ < 1.0 Wt. %

Bold = Congener in any of
Aroclors 1242, 1254 or
1260 @ > 1.0 Wt. %

† = Congener not in any of the
3 Aroclors @ > 0.05 Wt. %

Bold congeners related to mixes #6, 7 & 8 marginally above
0.05 Wt. %, except #43 @ 0.24 Wt. % in Aroclor 1242.

Some "non-Aroclor" congeners assigned to Mixes 1-5 to
reduce coelutions and number of mixes needed.

**PCBs Congeners Calibration Mixtures
NOT present in Aroclors
continued on next page**



PCB Congener Calibration Mixtures

**9 Mixtures provide All 209 Congeners
NOT Present in Aroclors**

PCB Congener Mix #6

C-CS-06	1 x 1 mL
10 µg/mL each in Isooctane	18 comps.
No.	
11	3,3'-Dichlorobiphenyl †
21	2,3,4-Trichlorobiphenyl †
38	3,4,5-Trichlorobiphenyl †
50	2,2',4,6-Tetrachlorobiphenyl †
57	2,3,3',5-Tetrachlorobiphenyl †
61	2,3,4,5-Tetrachlorobiphenyl †
65	2,3,5,6-Tetrachlorobiphenyl †
86	2,2',3,4,5-Pentachlorobiphenyl †
102	2,2',4,5,6'-Pentachlorobiphenyl †
113	2,3,3',5',6-Pentachlorobiphenyl †
126	3,3',4,4',5-Pentachlorobiphenyl †
127	3,3',4,5,5'-Pentachlorobiphenyl †
133	2,2',3,3',5,5'-Hexachlorobiphenyl †
139	2,2',3,4,4',6-Hexachlorobiphenyl †
145	2,2',3,4,6,6'-Hexachlorobiphenyl †
161	2,3,3',4,5',6-Hexachlorobiphenyl †
169	3,3',4,4',5,5'-Hexachlorobiphenyl †
181	2,2',3,4,4',5,6-Heptachlorobiphenyl

PCB Congener Mix #7

C-CS-07	1 x 1 mL
10 µg/mL each in Isooctane	14 comps.
No.	
36	3,3',5-Trichlorobiphenyl †
72	2,3',5,5'-Tetrachlorobiphenyl †
78	3,3',4,5-Tetrachlorobiphenyl †
79	3,3',4,5'-Tetrachlorobiphenyl †
89	2,2',3,4,6'-Pentachlorobiphenyl †
96	2,2',3,6,6'-Pentachlorobiphenyl †
98	2,2',3',4,6-Pentachlorobiphenyl †
106	2,3,3',4,5-Pentachlorobiphenyl †
108	2,3,3',4,5'-Pentachlorobiphenyl †
152	2,2',3,5,6,6'-Hexachlorobiphenyl †
166	2,3,4,4',5,6-Hexachlorobiphenyl †
182	2,2',3,4,4',5,6'-Heptachlorobiphenyl †
184	2,2',3,4,4',6,6'-Heptachlorobiphenyl †
204	2,2',3,4,4',5,6,6'-Octachlorobiphenyl †

PCB Congener Mix #8

C-CS-08	1 x 1 mL
10 µg/mL each in Isooctane	12 comps.
No.	
30	2,4,6-Trichlorobiphenyl †
43	2,2',3,5-Tetrachlorobiphenyl †
55	2,3,3',4-Tetrachlorobiphenyl †
58	2,3,3',5'-Tetrachlorobiphenyl †
76	2',3,4,5-Tetrachlorobiphenyl †
109	2,3,3',4,6-Pentachlorobiphenyl †
112	2,3,3',5,6-Pentachlorobiphenyl †
120	2,3',4,5,5'-Pentachlorobiphenyl †
159	2,3,3',4,5,5'-Hexachlorobiphenyl †
186	2,2',3,4,5,6,6'-Heptachlorobiphenyl †
192	2,3,3',4,5,5',6-Heptachlorobiphenyl †
198	2,2',3,3',4,5,5',6-Octachlorobiphenyl †

PCB Congener Mix #9

C-CS-09	1 x 1 mL
10 µg/mL each in Isooctane	21 comps.
No.	
23	2,3,5-Trichlorobiphenyl †
39	3,4',5-Trichlorobiphenyl †
62	2,3,4,6-Tetrachlorobiphenyl †
68	2,3',4,5'-Tetrachlorobiphenyl †
80	3,3',5,5'-Tetrachlorobiphenyl †
88	2,2',3,4,6-Pentachlorobiphenyl †
94	2,2',3,5,6'-Pentachlorobiphenyl †
111	2,3,3',5,5'-Pentachlorobiphenyl †
116	2,3,4,5,6-Pentachlorobiphenyl †
121	2,3',4,5',6-Pentachlorobiphenyl †
125	2',3,4,5,6'-Pentachlorobiphenyl †
140	2,2',3,4,4',6'-Hexachlorobiphenyl †
142	2,2',3,4,5,6-Hexachlorobiphenyl †
143	2,2',3,4,5,6'-Hexachlorobiphenyl †
148	2,2',3,4,5,6'-Hexachlorobiphenyl †
150	2,2',3,4',6,6'-Hexachlorobiphenyl †
155	2,2',4,4',6,6'-Hexachlorobiphenyl †
160	2,3,3',4,5,6-Hexachlorobiphenyl †
162	2,3,3',4',5,5'-Hexachlorobiphenyl †
168	2,3',4,4',5',6-Hexachlorobiphenyl †
188	2,2',3,4',5,6,6'-Heptachlorobiphenyl †

Congener Calibration Solution Sets

Mixes containing all 209 PCB congeners.

C-CSQ-SET			9 x 1 mL†
1 mL each of:			
C-CS-01	C-CS-04	C-CS-07	
C-CS-02	C-CS-05	C-CS-08	
C-CS-03	C-CS-06	C-CS-09	

Mixes for congeners found in Aroclor® 1242, 1254 and 1260

C-CSA-SET		5 x 1 mL
1 mL each of:		
C-CS-01	C-CS-03	C-CS-05
C-CS-02	C-CS-04	

Mixes for non-Aroclor congeners

C-CSN-SET	4 x 1 mL
1 mL each of:	
C-CS-06	C-CS-08
C-CS-07	C-CS-09

Reference Key

non-Bold = Congener in any of Aroclors 1242, 1254 or 1260 @ < 1.0 Wt.%

Bold = Congener in any of Aroclors 1242, 1254 or 1260 @ > 1.0 Wt.%

† = Congener not in any of the 3 Aroclors @ > 0.05 Wt.%

Bold congeners related to mixes #6, 7 & 8 marginally above 0.05 Wt.%, except #43 @ 0.24 Wt.% in Aroclor 1242.

Some "non-Aroclor" congeners assigned to Mixes 1-5 to reduce coelutions and number of mixes needed.





Method 680 PCB Analytes

Internal Standards

M-680-IS 1 x 1 mL
M-680-IS-PAK **SAVE** 5 x 1 mL
 75 µg/mL each in Hexane 2 comps.

M-680-IS-10X 1 x 1 mL
M-680-IS-10X-PAK **SAVE** 5 x 1 mL
 750 µg/mL each in Hexane 2 comps.

Chrysene-d₁₂ Phenanthrene-d₁₀

PCB Locator Mixture

M-PCBL 1 x 1 mL
M-PCBL-PAK **SAVE** 5 x 1 mL
 At stated conc. in Isooctane 5 comps.

Aroclor 1242 (0.5 µg/mL)
 Aroclor 1260 (0.5 µg/mL)
 2-Chlorobiphenyl (0.1 µg/mL)
 3-Chlorobiphenyl (0.1 µg/mL)
 Decachlorobiphenyl (0.1 µg/mL)

Retention Time Calibration Std.

M-680-RT 1 x 1 mL
M-680-RT-PAK **SAVE** 5 x 1 mL
 100 µg/mL each in Hexane 3 comps.

3,3',4,4'-Tetrachlorobiphenyl
 2,2',4,6,6'-Pentachlorobiphenyl
 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl

See EPA section Method 680 for complete analyte list.

PCB Isomer Calibration Mix

M-680A 1 x 1 mL
 At stated conc. in Hexane 9 comps.

1	2-Chlorobiphenyl	(50 µg/mL)
5	2,3-Dichlorobiphenyl	(50 µg/mL)
29	2,4,5-Trichlorobiphenyl	(50 µg/mL)
50	2,2',4,6-Tetrachlorobiphenyl	(100 µg/mL)
87	2,2',3,4,5'-Pentachlorobiphenyl	(100 µg/mL)
154	2,2',4,4',5,6'-Hexachlorobiphenyl	(100 µg/mL)
188	2,2',3,4',5,6,6'-Heptachlorobiphenyl	(150 µg/mL)
201	2,2',3,3',4,5',6,6'-Octachlorobiphenyl	(150 µg/mL)
209	2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	(250 µg/mL)

Technical Note

The EPA has designated the isomers for use in quantifying PCB's by GC/MS. The PCBs are identified and measured as isomer groups (i.e., by level of chlorination). A concentration is measured for each PCB isomer group; total PCB concentration in each sample extract is obtained by summing isomer group concentrations.

Internal Standard

M-680B 1 x 1 mL
 250 µg/mL in Toluene
 Chrysene-d₁₂

Tuning Standard

M-680-TS 1 x 1 mL
M-680-TS-PAK **SAVE** 5 x 1 mL
 10 µg/mL in CH₂Cl₂
 Decafluorotriphenylphosphine (DFTPP)

PCB Isomer Calibration Set

M-680-SET 2 x 1 mL
 Includes: M-680A (Mix) M-680B (Internal Standard)

Level of Chlorination	Isomer Selected	Congener Number	RF Value vs. Chrysene-d ₁₂	Mean RF Value vs. Chrysene-d ₁₂
1	2-mono	1	0.899	0.925
2	2,3-di	5	0.651	0.642
3	2,4,5-tri	29	0.411	0.411
4	2,2',4,6-tetra	50	0.305	0.431
5	2,2',3,4,5'-penta	87	0.299	0.287
6	2,2',4,4',5,6'-hexa	154	0.254	0.254
7	2,2',3,4',5,6,6'-hepta	188	0.164	0.160
8	2,2',3,3',4,5',6,6'-octa	201	0.207	0.191
9,10	2,2',3,3',4,4',5,5',6,6'-deca	209	0.144	0.150

Instrument Test Solutions

PCB Window Defining Mixture

C-WDM 1 x 1 mL
C-WDM-PAK **SAVE** 5 x 1 mL
 2.5 µg/mL each in Isooctane 20 comps.

No.
 0 Biphenyl
 1 2-Chlorobiphenyl
 3 4-Chlorobiphenyl
 10 2,6-Dichlorobiphenyl
 15 4,4'-Dichlorobiphenyl
 19 2,2',6-Trichlorobiphenyl
 37 3,4,4'-Trichlorobiphenyl
 54 2,2',6,6'-Tetrachlorobiphenyl
 77 3,3',4,4'-Tetrachlorobiphenyl
 104 2,2',4,6,6'-Pentachlorobiphenyl
 126 3,3',4,4',5-Pentachlorobiphenyl
 155 2,2',4,4',6,6'-Hexachlorobiphenyl
 169 3,3',4,4',5,5'-Hexachlorobiphenyl
 188 2,2',3,4',5,6,6'-Heptachlorobiphenyl
 189 2,3,3',4,4',5,5'-Heptachlorobiphenyl
 202 2,2',3,3',5,5',6,6'-Octachlorobiphenyl
 205 2,3,3',4,4',5,5',6-Octachlorobiphenyl
 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl
 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl
 209 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl

PCB Calibration Check Solution

C-CCSEC 1 x 1 mL
C-CCSEC-PAK **SAVE** 5 x 1 mL
 100 µg/mL each in Acetone 20 comps.

C-CCSEC-R 1 x 1 mL
C-CCSEC-R-PAK **SAVE** 5 x 1 mL
 C-CCSEC plus 2,2',3,3',4,5',6,6'-Octachlorobiphenyl 21 comps.

Special Blend

No.
 8 2,4'-Dichlorobiphenyl
 18 2,2',5-Trichlorobiphenyl
 28 2,4,4'-Trichlorobiphenyl
 44 2,2',3,5'-Tetrachlorobiphenyl
 52 2,2',5,5'-Tetrachlorobiphenyl
 66 2,3',4,4'-Tetrachlorobiphenyl
 77 3,3',4,4'-Tetrachlorobiphenyl
 101 2,2',4,5,5'-Pentachlorobiphenyl
 105 2,3,3',4,4'-Pentachlorobiphenyl
 118 2,3',4,4',5-Pentachlorobiphenyl
 126 3,3',4,4',5-Pentachlorobiphenyl
 128 2,2',3,3',4,4'-Hexachlorobiphenyl
 138 2,2',3,4,4',5'-Hexachlorobiphenyl
 153 2,2',4,4',5,5'-Hexachlorobiphenyl
 170 2,2',3,3',4,4',5-Heptachlorobiphenyl
 180 2,2',3,4,4',5,5'-Heptachlorobiphenyl
 187 2,2',3,4',5,5',6-Heptachlorobiphenyl
 195 2,2',3,3',4,4',5,6-Octachlorobiphenyl
 206 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl
 209 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl

PCB/Selective Ion Monitoring Solution

PCB-SIM 1 x 1 mL
PCB-SIM-PAK **SAVE** 5 x 1 mL
 At stated conc. in Hexane 12 comps.

No.
 1 2-Chlorobiphenyl (10 µg/mL)
 5 2,3-Dichlorobiphenyl (10 µg/mL)
 29 2,4,5-Trichlorobiphenyl (10 µg/mL)
 104 2,2',4,6,6'-Pentachlorobiphenyl (20 µg/mL)
 87 2,2',3,4,5'-Pentachlorobiphenyl (20 µg/mL)
 208 2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (40 µg/mL)
 50 2,2',4,6-Tetrachlorobiphenyl (20 µg/mL)
 209 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl (50 µg/mL)
 77 3,3',4,4'-Tetrachlorobiphenyl (20 µg/mL)
 200 2,2',3,3',4,4',5,6,6'-Octachlorobiphenyl (30 µg/mL)
 186 2,2',3,4',5,6,6'-Heptachlorobiphenyl (30 µg/mL)
 154 2,2',4,4',5,6'-Hexachlorobiphenyl (20 µg/mL)

Technical Note

For use with 5% phenyl methyl silicone type columns



Aroclors

(Industrial PCBs)

Aroclors

Aroclor Solutions in Isooctane and Methanol, 2 Concentrations (Individuals, PAKs, Sets)

Aroclor #	Isooctane 35 µg/mL	1 mL	SAVE PAK 5 x 1 mL	Isooctane 100 µg/mL	1 mL	Methanol 35 µg/mL	1 mL	SAVE PAK 5 x 1 mL	Methanol 100 µg/mL	1 mL
Aroclor 1016	C-216S		C-216S-PAK	C-216S-TP		C-216S-M		C-216S-M-PAK	C-216S-M-2.85X	
Aroclor 1221	C-221S		C-221S-PAK	C-221S-TP		C-221S-M		C-221S-M-PAK	C-221S-M-2.85X	
Aroclor 1232	C-232S		C-232S-PAK	C-232S-TP		C-232S-M		C-232S-M-PAK	C-232S-M-2.85X	
Aroclor 1242	C-242S		C-242S-PAK	C-242S-TP		C-242S-M		C-242S-M-PAK	C-242S-M-2.85X	
Aroclor 1248	C-248S		C-248S-PAK	C-248S-TP		C-248S-M		C-248S-M-PAK	C-248S-M-2.85X	
Aroclor 1254	C-254S		C-254S-PAK	C-254S-TP		C-254S-M		C-254S-M-PAK	C-254S-M-2.85X	
Aroclor 1260	C-260S		C-260S-PAK	C-260S-TP		C-260S-M		C-260S-M-PAK	C-260S-M-2.85X	
Aroclor 1262	C-262S		C-262S-PAK	C-262S-TP		C-262S-M		C-262S-M-PAK	C-262S-M-2.85X	
Aroclor 1268	C-268S		C-268S-PAK	C-268S-TP		C-268S-M		C-268S-M-PAK	C-268S-M-2.85X	
Set of above	Z-008S-SET		9 x 1 mL			Z-008S-M-SET		9 x 1 mL		

Aroclor Solutions in Hexane, 2 Concentrations (Individuals, PAKs, Sets)

Aroclor #	Hexane 100 µg/mL	1 mL	SAVE PAK 5 x 1 mL	Hexane 1000 µg/mL	1 mL
Aroclor 1016	C-216S-H		C-216S-H-10X-PAK	C-216S-H-10X	
Aroclor 1221	C-221S-H		C-221S-H-10X-PAK	C-221S-H-10X	
Aroclor 1232	C-232S-H		C-232S-H-10X-PAK	C-232S-H-10X	
Aroclor 1242	C-242S-H		C-242S-H-10X-PAK	C-242S-H-10X	
Aroclor 1248	C-248S-H		C-248S-H-10X-PAK	C-248S-H-10X	
Aroclor 1254	C-254S-H		C-254S-H-10X-PAK	C-254S-H-10X	
Aroclor 1260	C-260S-H		C-260S-H-10X-PAK	C-260S-H-10X	
Aroclor 1262	C-262S-H		C-262S-H-10X-PAK	C-262S-H-10X	
Aroclor 1268	C-268S-H		C-268S-H-10X-PAK	C-268S-H-10X	
Set of 9 above	Z-008S-H-SET		Z-008S-H-10X-SET		

Aroclor Neats (Individuals)

Aroclor #	Neat	Unit
Aroclor 1016	C-216N	100 mg
Aroclor 1221	C-221N-50MG	50 mg
Aroclor 1232	-----	-----
Aroclor 1242	C-242N-50MG	50 mg
Aroclor 1248	C-248N-50MG	50 mg
Aroclor 1254	C-254N-50MG	50 mg
Aroclor 1260	C-260N-50MG	50 mg
Aroclor 1262	C-262N-50MG	50 mg
Aroclor 1268	-----	-----

Solutions in PCB-Free Transformer Oil (Individuals, 2 Concentrations)

Aroclor # CAS No.	Conc. ppm w/w	Individual Cat. No.	1 mL	PAK SAVE Cat. No.	5 x 1 mL
Aroclor 1016	50	C-216-ST-1		C-216-ST-1-PAK	
12674-11-2	500	C-216-ST-2		C-216-ST-2-PAK	
Aroclor 1221	50	C-221-ST-1		C-221-ST-1-PAK	
11104-28-2	500	C-221-ST-2		C-221-ST-2-PAK	
Aroclor 1232	50	C-232-ST-1		C-232-ST-1-PAK	
11141-16-5	500	C-232-ST-2		C-232-ST-2-PAK	
Aroclor 1242	50	C-242-ST-1		C-242-ST-1-PAK	
53469-21-9	500	C-242-ST-2		C-242-ST-2-PAK	
Aroclor 1248	50	C-248-ST-1		C-248-ST-1-PAK	
12672-29-6	500	C-248-ST-2		C-248-ST-2-PAK	
Aroclor 1254	50	C-254-ST-1		C-254-ST-1-PAK	
11097-69-1	500	C-254-ST-2		C-254-ST-2-PAK	
Aroclor 1260	50	C-260-ST-1		C-260-ST-1-PAK	
11096-82-5	500	C-260-ST-2		C-260-ST-2-PAK	
Aroclor 1262	50	C-262-ST-1		C-262-ST-1-PAK	
37324-23-5	500	C-262-ST-2		C-262-ST-2-PAK	
Aroclor 1268	50	C-268-ST-1		C-268-ST-1-PAK	
11100-14-4	500	C-268-ST-2		C-268-ST-2-PAK	

Aroclor-free Transformer Oil T-W130 1 x 1 mL

Aroclors 1221 & 1254 Similar but Different

Reference Standards of Aroclor Mixtures (for GC analysis)

Technical mixtures of PCBs (Aroclors) were manufactured by Monsanto from the 1930s through 1977. In some instances there was an alteration in the manufacturing process which resulted in a more radical components change than the usual variations. This was the case for a particular batch of Aroclor 1254 (54% Chlorine by weight) that was chlorinated in two stages rather than the usual one. The product of the two stage manufacturing process was a material containing higher concentrations of the more toxic non-ortho substituted congeners. Consequently, the analyst may have to identify and quantify two distinct types of Aroclor 1254. For different reasons there also exist two distinct types of Aroclor 1221. To eliminate any confusion when encountering these Aroclors, AccuStandard offers (as an exclusive) all four variations.

C-221S-TYPE1* and C-221S-TYPE2*	C-221S-SET	2 x 1 mL
C-254S-TYPE1* and C-254S-TYPE2*	C-254S-SET	2 x 1 mL

Solutions in these sets are 35 µg/mL in Isooctane

All Standards cited in this monograph are bonafide and unadulterated Monsanto product.

Technical Note

Major Isomer Components of Aroclor 1254

Aroclor® 1254 was the most commonly used of the industrial PCB fluids. This list contains congeners which constitute the majority of the components in this material. They are offered in both neat form and solution. Solutions are in 35 µg/mL in isooctane.

For 1254 only the following congeners may be found at > 0.5% by weight by Congener Number:

#s 44,49, 52, 56, 64, 66, 70, 74, 82, 84, 85, 87, 91, 92, 95, 97, 99, 101, 105, 110, 118, 128, 130, 132, 135, 136, 138, 141, 146, 149, 151, 153, 156, 158, 163, 170, 180.

- The coplanar polychlorinated biphenyl (PCB) congeners; 3,3',4,4'-Tetrachlorobiphenyl (# 77), 3,3',4,4',5-Pentachlorobiphenyl (# 126), and 3,3',4,4',5,5'-Hexachlorobiphenyl (# 169) are recognized as the most toxic components of Aroclors.
- The major problem in isolation of these PCB congeners is the separation of 2,3,3',4',6-Pentachlorobiphenyl (# 110) from 3,3',4,4'-Tetrachlorobiphenyl (# 77).
- A simple cleanup procedure using alumina is proposed for the fractionation of the Aroclors on alumina which allows the isolation and analysis of the coplanar PCB congeners (1).
- The proposed internal standard 3,3',4,4'-Tetrabromobiphenyl (B-077S) enhances the accuracy of the procedure.

3,3',4,4'-Tetrabromobiphenyl is used as an Internal Standard to identify and quantify the coplanar components of Aroclors ⁽¹⁾.

(1) Analysis of coplanar PCB congeners in Aroclors using alumina column cleanup. Jerry W. Anderson, ManTech Environmental Technology, Inc., R.S. Kerr Environmental Research Laboratory, U.S. Environmental Protection Agency, P.O. Box 1198, Ada, OK 74820 - Pittsburgh Conference, March 1992, New Orleans

B-077S	1 x 1 mL
35 µg/mL in Isooctane	
3,3',4,4'-Tetrabromobiphenyl	

Hydroxy-Chlorobiphenyls

Compound	CAS No.	NEAT Cat. No.	Unit	100 µg/mL in Isooctane Cat. No.	1 mL
2-Hydroxy-5-chlorobiphenyl	607-12-5	HPCB-1001N	5 mg	HPCB-1001S	
4-Hydroxy-2-chlorobiphenyl	23719-22-4	HPCB-1002N	5 mg	HPCB-1002S	
4-Hydroxy-3-chlorobiphenyl	92-04-6	HPCB-1003N	5 mg	HPCB-1003S	
4-Hydroxy-4'-chlorobiphenyl	28034-99-3	HPCB-1004N	10 mg	HPCB-1004S	
2-Hydroxy-2',5'-dichlorobiphenyl	53905-30-9	HPCB-2001N	10 mg	HPCB-2001S	
3-Hydroxy-2',5'-dichlorobiphenyl	53905-29-6	HPCB-2002N	10 mg	HPCB-2002S	
4-Hydroxy-2',5'-dichlorobiphenyl	53905-28-5	HPCB-2003N	10 mg	HPCB-2003S	
4-Hydroxy-3,5-dichlorobiphenyl	1137-59-3	HPCB-2004N	10 mg	HPCB-2004S	
2-Hydroxy-2',3'-dichlorobiphenyl		HPCB-2005N	10 mg	HPCB-2005S	
2-Hydroxy-3',4'-dichlorobiphenyl		HPCB-2006N	10 mg	HPCB-2006S	
2-Hydroxy-2',4',6'-trichlorobiphenyl		HPCB-3001N	10 mg	HPCB-3001S	
2-Hydroxy-2',5,5'-trichlorobiphenyl		HPCB-3002N	10 mg	HPCB-3002S	
3-Hydroxy-2',4',6'-trichlorobiphenyl		HPCB-3003N	10 mg	HPCB-3003S	
4-Hydroxy-2,2',5'-trichlorobiphenyl	53905-33-2	HPCB-3004N	5 mg	HPCB-3004S	
4-Hydroxy-2',3,5'-trichlorobiphenyl		HPCB-3005N	5 mg	HPCB-3005S	
4-Hydroxy-2',4',6'-trichlorobiphenyl	14962-28-8	HPCB-3006N	10 mg	HPCB-3006S	
2-Hydroxy-2',3',4',5'-tetrachlorobiphenyl		HPCB-4001N	10 mg	HPCB-4001S	
2-Hydroxy-2',3',5',6'-tetrachlorobiphenyl		HPCB-4002N	10 mg	HPCB-4002S	
2-Hydroxy-2',4',5,6'-tetrachlorobiphenyl		HPCB-4003N	10 mg	HPCB-4003S	
3-Hydroxy-2',3',4',5'-tetrachlorobiphenyl	67651-37-0	HPCB-4004N	10 mg	HPCB-4004S	
3-Hydroxy-2',3',5',6'-tetrachlorobiphenyl		HPCB-4005N	10 mg	HPCB-4005S	
4-Hydroxy-2,2',4',6'-tetrachlorobiphenyl	150304-08-8	HPCB-4006N	5 mg	HPCB-4006S	
4-Hydroxy-2',3',4',5'-tetrachlorobiphenyl	67651-34-7	HPCB-4007N	10 mg	HPCB-4007S	
4-Hydroxy-2',3,4',6'-tetrachlorobiphenyl		HPCB-4008N	5 mg	HPCB-4008S	
4-Hydroxy-2',3,5,5'-tetrachlorobiphenyl		HPCB-4009N	10 mg	HPCB-4009S	
4-Hydroxy-2',3',5',6'-tetrachlorobiphenyl	14962-32-4	HPCB-4010N	10 mg	HPCB-4010S	
4'-Hydroxy-3,3',4,5'-tetrachlorobiphenyl NEW		-----	-----	HPCB-4011S	
3-Hydroxy-2,2',6,6'-tetrachlorobiphenyl		-----	-----	HPCB-4012S	
2-Hydroxy-2',3,5,6'-tetrachlorobiphenyl NEW		-----	-----	HPCB-4013S	
5-Hydroxy-2,2',4,6'-tetrachlorobiphenyl		-----	-----	HPCB-4014S	
4,4'-Dihydroxy-2,2',6,6'-tetrachlorobiphenyl		-----	-----	HPCB-4015S	
4,6'-Dihydroxy-2,2',4,6'-tetrachlorobiphenyl NEW		-----	-----	HPCB-4016S	
2-Hydroxy-2',3',4',5,5'-pentachlorobiphenyl	67651-36-9	HPCB-5001N	10 mg	HPCB-5001S	
2-Hydroxy-2',3',5,5',6'-pentachlorobiphenyl		HPCB-5002N	10 mg	HPCB-5002S	
4-Hydroxy-2,2',3',4',5'-pentachlorobiphenyl		HPCB-5003N	5 mg	HPCB-5003S	
4-Hydroxy-2,2',3',5',6'-pentachlorobiphenyl		HPCB-5004N	5 mg	HPCB-5004S	
4-Hydroxy-2',3,3',4',5'-pentachlorobiphenyl	67651-35-8	HPCB-5005N	5 mg	HPCB-5005S	
4-Hydroxy-2',3,3',5',6'-pentachlorobiphenyl		HPCB-5006N	5 mg	HPCB-5006S	
4-Hydroxy-2',3,4',5,6'-pentachlorobiphenyl		HPCB-5007N	10 mg	HPCB-5007S	
3-Hydroxy-2,2',4',5,5'-pentachlorobiphenyl	69278-58-6	-----	-----	HPCB-5008S	
4-Hydroxy-2,2',4',5,5'-pentachlorobiphenyl		-----	-----	HPCB-5009S	
2-Hydroxy-2',3,4',5,6'-pentachlorobiphenyl		-----	-----	HPCB-5010S	
4-Hydroxy-2',3,3',4',5,5'-hexachlorobiphenyl	158076-63-2	HPCB-6001N	10 mg	HPCB-6001S	
4-Hydroxy-2',3,3',5,5',6'-hexachlorobiphenyl		HPCB-6002N	10 mg	HPCB-6002S	
5-Hydroxy-2,2',3,4,4',5'-hexachlorobiphenyl NEW		-----	-----	HPCB-6003S	
4'-Hydroxy-2,2',3,3',4,5,5'-heptachlorobiphenyl		-----	-----	HPCB-7001S	
3'-Hydroxy-2,2',3,4,4',5,6'-heptachlorobiphenyl NEW		-----	-----	HPCB-7002S	
3'-Hydroxy-2,2',3,4,4',5,5'-heptachlorobiphenyl		-----	-----	HPCB-7003S	
5-Hydroxy-2,2',3,4,4',5,6'-heptachlorobiphenyl		-----	-----	HPCB-7004S	

Methoxy PCBs

Compound	100 µg/mL in Isooctane Cat. No.	1 mL	Compound	100 µg/mL in Isooctane Cat. No.	1 mL
2-Methoxy-5-chlorobiphenyl	MOPCB-1001S		2-Methoxy-2',3',4',5'-tetrachlorobiphenyl	MOPCB-4001S	
4-Methoxy-2-chlorobiphenyl	MOPCB-1002S		2-Methoxy-2',3',5',6'-tetrachlorobiphenyl	MOPCB-4002S	
4-Methoxy-3-chlorobiphenyl	MOPCB-1003S		2-Methoxy-2',4',5,6'-tetrachlorobiphenyl	MOPCB-4003S	
4-Methoxy-4'-chlorobiphenyl	MOPCB-1004S		3-Methoxy-2',3',4',5'-tetrachlorobiphenyl	MOPCB-4004S	
2-Methoxy-2'-5-dichlorobiphenyl NEW	MOPCB-2001S		3-Methoxy-2',3',5',6'-tetrachlorobiphenyl	MOPCB-4005S	
3-Methoxy-2',5'-dichlorobiphenyl	MOPCB-2002S		4-Methoxy-2',3',4',5'-tetrachlorobiphenyl	MOPCB-4007S	
4-Methoxy-2',5'-dichlorobiphenyl	MOPCB-2003S		4-Methoxy-2',3,4',6'-tetrachlorobiphenyl	MOPCB-4008S	
4-Methoxy-3,5-dichlorobiphenyl	MOPCB-2004S		4-Methoxy-2',3,5,5'-tetrachlorobiphenyl	MOPCB-4009S	
2-Methoxy-2',3'-dichlorobiphenyl	MOPCB-2005S		4'-Methoxy-3,3',4,5'-tetrachlorobiphenyl NEW	MOPCB-4011S	
2-Methoxy-3',4'-dichlorobiphenyl	MOPCB-2006S		3-Methoxy-2,2',6,6'-tetrachlorobiphenyl NEW	MOPCB-4012S-0.5X *	
2-Methoxy-2',4',6'-trichlorobiphenyl	MOPCB-3001S		2-Methoxy-2',3',4',5,5'-pentachlorobiphenyl	MOPCB-5001S	
2-Methoxy-2',5,5'-trichlorobiphenyl	MOPCB-3002S		2-Methoxy-2',3',5,5',6'-pentachlorobiphenyl	MOPCB-5002S	
3-Methoxy-2',4',6'-trichlorobiphenyl	MOPCB-3003S		4-Methoxy-2,2',3',4',5'-pentachlorobiphenyl	MOPCB-5003S	
4-Methoxy-2,2',5'-trichlorobiphenyl	MOPCB-3004S		4-Methoxy-2,2',3',5',6'-pentachlorobiphenyl	MOPCB-5004S	
4-Methoxy-2',3,5'-trichlorobiphenyl	MOPCB-3005S		4-Methoxy-2,2',4',5,5'-pentachlorobiphenyl	MOPCB-5009S	
4-Methoxy-2',4',6'-trichlorobiphenyl	MOPCB-3006S		2-Methoxy-2',3,4',5,6'-pentachlorobiphenyl	MOPCB-5010S	
			4-Methoxy-2',3,3',4',5,5'-hexachlorobiphenyl	MOPCB-6001S	
			5-Methoxy-2,2',3,4,4',5'-hexachlorobiphenyl NEW	MOPCB-6003S	
			4'-Methoxy-2,2',3,3',4,5,5'-heptachlorobiphenyl	MOPCB-7001S-0.5X *	
			5-Methoxy-2,2',3,4,4',5,6'-heptachlorobiphenyl NEW	MOPCB-7004S-0.5X *	

* in 50 µg/mL



PCB Metabolites

Methylsulfonyl PCB Congeners

Compound	CAS No.	50 µg/mL in Isooctane Cat. No.	1 mL
3-Methylsulfonyl-2,2',4',5-tetrachlorobiphenyl	116807-52-4	MSCB-3049	
3-Methylsulfonyl-2,2',5,5'-tetrachlorobiphenyl	60640-54-2	MSCB-3052	
3-Methylsulfonyl-2,3',4',5-tetrachlorobiphenyl	116807-53-5	MSCB-3070	
3-Methylsulfonyl-2,2',3',4',5-pentachlorobiphenyl	66640-58-2	MSCB-3087	
3-Methylsulfonyl-2,2',4',5,6-pentachlorobiphenyl	149949-86-0	MSCB-3091	
3-Methylsulfonyl-2,2',3',5,6-pentachlorobiphenyl		MSCB-3095	
3-Methylsulfonyl-2,2',4',5,5'-pentachlorobiphenyl	66640-60-6	MSCB-3101	
3-Methylsulfonyl-2,3',4',5,6-pentachlorobiphenyl	116807-23-9	MSCB-3110	
3-Methylsulfonyl-2,2',3',4',5,6-hexachlorobiphenyl	149949-90-6	MSCB-3132	
3-Methylsulfonyl-2,2',3',4',5,5'-hexachlorobiphenyl	104086-18-2	MSCB-3141	
3-Methylsulfonyl-2,2',4',5,5',6-hexachlorobiphenyl	149949-88-2	MSCB-3149	
3-Methylsulfonyl-2,2',3',4',5,5',6-heptachlorobiphenyl		MSCB-3174	
4-Methylsulfonyl-2,2',4',5-tetrachlorobiphenyl	69797-52-0	MSCB-4049	
4-Methylsulfonyl-2,2',5,5'-tetrachlorobiphenyl	60640-55-3	MSCB-4052	
4-Methylsulfonyl-2,3',4',6-tetrachlorobiphenyl	108736-08-9	MSCB-4064	
4-Methylsulfonyl-2,3',4',5-tetrachlorobiphenyl	69797-51-9	MSCB-4070	
4-Methylsulfonyl-2,2',3',4',5-pentachlorobiphenyl	66640-59-3	MSCB-4087	
4-Methylsulfonyl-2,2',4',5,6-pentachlorobiphenyl	149949-87-1	MSCB-4091	
4-Methylsulfonyl-2,2',3',5,6-pentachlorobiphenyl		MSCB-4095	
4-Methylsulfonyl-2,2',4',5,5'-pentachlorobiphenyl	66640-61-7	MSCB-4101	
4-Methylsulfonyl-2,2',4',5,6'-pentachlorobiphenyl		MSCB-4103	
4-Methylsulfonyl-2,3,3',4',6-pentachlorobiphenyl	149949-89-3	MSCB-4110	
4-Methylsulfonyl-2,2',3,3',4',6-hexachlorobiphenyl	104086-16-0	MSCB-4132	
4-Methylsulfonyl-2,2',3',4',5,5'-hexachlorobiphenyl	104086-19-3	MSCB-4141	
4-Methylsulfonyl-2,2',3,4',5',6-hexachlorobiphenyl	116806-76-9	MSCB-4149	
4-Methylsulfonyl-2,2',3',4',5,5',6-heptachlorobiphenyl	153310-30-6	MSCB-4174	
3-Methylsulfonyl-4-methyl-2',3',4',5,5'-pentachlorobiphenyl (ISTD)		MSCB-IS	

Technical Note

An important group of persistent PCB metabolites, the methylsulfonyl PCBs (MeSO₂-PCBs) have been added. Only the 3- and 4-MeSO₂-PCBs with chlorine atoms in the 2,5- or 2,3,6-position have been found in environmental samples, and therefore only those are offered by AccuStandard.

Hydroxy-Biphenyls

Compound	CAS No.	NEAT Cat. No.	Unit	100 µg/mL in MeOH Cat. No.	1 mL
2-Hydroxy-biphenyl	90-43-7	HBP-001N	100 mg	HBP-001S	
3-Hydroxy-biphenyl	580-51-8	HBP-002N	100 mg	HBP-002S	
4-Hydroxy-biphenyl	92-69-3	HBP-003N	100 mg	HBP-003S	
2,2'-Dihydroxy-biphenyl	1806-29-7	HBP-004N	100 mg	HBP-004S	
4,4'-Dihydroxy-biphenyl	92-88-6	HBP-006N	100 mg	HBP-006S	
2,5-Dihydroxy-biphenyl	1079-21-6	HBP-009N	100 mg	HBP-009S	

Purchasing Neat Standards

There are two ways to purchase neat standards: Nominal weight and exact weight. With exact weight, the standards will come with the exact weight contained in the vial indicated on the label. The catalog number will have an X-WT to indicate that this is an exact weight. Rinse the sample out of the vial and cap with solvent and dilute to achieve the desired concentration. Unless specified, neat samples are provided with nominal weights. Typically, the vials contain up to 10 to 20% more product, however it is not known when you receive your standard what the exact amount is in the vial. Below is a standard procedure for removing all the neat material from the vial and determining the exact weight of the material in the vial.

Small amounts (5-10 mg) of powder often are spread over the surface of the vial and cap. If the chemical is a liquid it may coat the walls as a thin layer invisible to the eye. To recover all of the contents contained in a vial of neat material please use the procedure described below:

1. Wipe the outside of the vial (containing the Standard) clean and dry (including the cap).
2. Weigh the entire unit on an analytical balance. Record the weight to the nearest 0.1 mg.
3. Carefully transfer the contents to a volumetric flask using a suitable solvent. Rinse the cap and vial several times to assure a complete transfer.
4. Dry inside and outside of the vial and cap with mild heat or inert gas.
5. Weigh the empty dry vial on the same analytical balance to the nearest 0.1 mg and calculate by difference the amount of material transferred.





Perchlorinated Terphenyls

Compound	CAS No.	NEAT Cat. No.	Unit	35 µg/mL in Toluene Cat. No.	1 mL
o-Terphenyl	84-15-1	T-001N	100 mg	-----	--
m-Terphenyl	92-06-8	T-002N	100 mg	-----	--
p-Terphenyl	92-94-4	T-003N	100 mg	-----	--
Tetradecachloro-o-terphenyl		-----	-----	T-004S	
Tetradecachloro-m-terphenyl	42429-88-9	-----	-----	T-005S	
Tetradecachloro-p-terphenyl		-----	-----	T-006S	
Aroclor 5432	63496-31-1	-----	-----	T-432S	
Aroclor 5442	12642-23-8	-----	-----	T-442S	
Aroclor 5460	11126-42-4	-----	-----	T-460S	
Aroclor 6050		-----	-----	T-6050S	

Perchlorinated Aromatics

Compound	CAS No.	NEAT Cat. No.	Unit	35 µg/mL in Toluene Cat. No.	1 mL
Decachlorobiphenyl	2051-24-3	C-209N	10 mg	-----	--
Hexachlorobenzene	118-74-1	A-012	100 mg	-----	--
Octachlorodibenzofuran	39001-02-0	F-801N	50 mg	F-801S **	
Octachlorodibenzo-p-dioxin	3268-87-9	D-801N	50 mg	D-801S **	
Octachloronaphthalene	2234-13-1	-----	-----	N-003S *	
Octachlorostyrene	29082-74-4	-----	-----	PC-001S	
Perchlorinated p,p'-DDE		-----	-----	PC-002S	
Tetradecachloro-o-terphenyl		-----	-----	T-004S	
Tetradecachloro-m-terphenyl	42429-88-9	-----	-----	T-005S	
Tetradecachloro-p-terphenyl		-----	-----	T-006S	

* 100 µg/mL in MeOH

** 50 µg/mL in Toluene

Polychlorinated Naphthalenes

Halowaxes (Kopper's PCNs)

Compound	CAS No.	NEAT Cat. No.	Unit	100 µg/mL in MeOH Cat. No.	1 mL
Halowax 1013 (56 %Cl)	1321-64-8	-----	-----	N-1013S	
Halowax 1014 (62 %Cl)	1335-87-1	-----	-----	N-1014S	
Halowax 1051 (70 %Cl)	2234-13-1	-----	-----	N-1051S	
Halowax 1099 (52 %Cl)	39450-05-0	-----	-----	N-1099S	

Polychlorinated Naphthalene Congeners

Compound	CAS No.	NEAT Cat. No.	Unit
Naphthalene	91-20-3	H-152N	100 mg
1-Chloronaphthalene	90-13-1	N-001N	100 mg
2-Chloronaphthalene	91-58-7	N-002N	100 mg
1,4-Dichloronaphthalene	1825-31-6	N-004N	10 mg
Octachloronaphthalene	2234-13-1	N-003S *	1 mL
1,2,3,4-Tetrachloronaphthalene	20020-02-4	N-005N	10 mg

* 100 µg/mL in MeOH



Halogenated Aromatics (other than PCBs)

Halogenated Aromatics (other than PCBs)

Compound	CAS No.	Conc	Matrix	Cat. No.	1 mL
Decafluorobiphenyl	434-90-2	10 µg/mL	Acetone	M-551.1-SS	
		0.1 mg/mL	AcCN	M-8310-SS	
		0.2 mg/mL	CH ₂ Cl ₂	M-625-04	
		1 mg/mL	Acetone	M-551.1-SS-100X	
		2 mg/mL	CH ₂ Cl ₂	M-625-04-10X	
4,4'-Dibromobiphenyl	92-86-4	0.1 mg/mL	Ethyl acetate	M-508.1-SS	
		0.2 mg/mL	CH ₂ Cl ₂	M-625-05	
		1 mg/mL	Acetone	M-8111-IS-20X	
		2 mg/mL	CH ₂ Cl ₂	M-625-05-10X	
		0.2 mg/mL	CH ₂ Cl ₂	M-625-06	
4,4'-Dibromooctafluorobiphenyl	10386-84-2	2 mg/mL	CH ₂ Cl ₂	M-625-06-10X	
		0.2 mg/mL	CH ₂ Cl ₂	M-625-07	
2,2'-Difluorobiphenyl	388-82-9	1 mg/mL	MeOH	M-1653-IIS	
		2 mg/mL	CH ₂ Cl ₂	M-625-07-10X	
		5 mg/mL	Acetone	M-1653-IIS-R	
		0.2 mg/mL	CH ₂ Cl ₂	M-625-09	
2-Fluorobiphenyl	321-60-8	2 mg/mL	CH ₂ Cl ₂	M-625-09-10X	
		0.1 mg/mL	MeOH	N-1013S	
Halowax 1013	1321-64-8	0.1 mg/mL	MeOH	N-1014S	
Halowax 1014	1335-87-1	0.1 mg/mL	MeOH	N-1051S	
Halowax 1051	39450-05-0	0.1 mg/mL	MeOH	N-1099S	
Halowax 1099		5 mg/mL	MeOH	AS-E0470	
1,2,3,4,5,6,7,8-Octachloronaphthalene		100 µg/mL	MeOH	N-003S	
Tetradecachloro- <i>o</i> -terphenyl	2234-13-1	35 µg/mL	Toluene	T-004S	
Tetradecachloro- <i>m</i> -terphenyl		35 µg/mL	Toluene	T-005S	
Tetradecachloro- <i>p</i> -terphenyl		35 µg/mL	Toluene	T-006S	

Chlorodiphenyl Ether

Compound	CAS No.	Conc	Matrix	Cat. No.	1 mL
4-Chlorophenyl phenyl ether	7005-72-3	10 mg	NEAT	CDE-003N	
		50 µg/mL	Isooctane	CDE-003S	
2,4-Dichlorodiphenyl ether		10 mg	NEAT	CDE-007N	
		50 µg/mL	Isooctane	CDE-007S	
4,4'-Dichlorodiphenyl ether	2444-89-5	10 mg	NEAT	CDE-015N	
		50 µg/mL	Isooctane	CDE-015S	
3,3',4,4'-Tetrachlorodiphenyl ether		50 µg/mL	Isooctane	CDE-077S	
2,3,3',4,4'-Pentachlorodiphenyl ether		50 µg/mL	Isooctane	CDE-105S	
2,3',4,4',5-Pentachlorodiphenyl ether	60123-65-1	10 mg	NEAT	CDE-118N	
		50 µg/mL	Isooctane	CDE-118S	
Decachlorodiphenyl ether	31710-30-2	10 mg	NEAT	CDE-209N	
		50 µg/mL	Isooctane	CDE-209S	



Dibenzo-p-dioxin Congeners



The Environmental Protection Agency published its final rule regulating dioxin-containing waste in the Federal Register - Volume 5, 1978-1979, January 14, 1985.

Minimum purity 98%

Dioxins

Dibenzo-p-dioxin Congeners

Compound	CAS No.	NEAT Cat. No.	Unit	SOLUTION Cat. No.	Conc.	Solvent	1 mL
1-Chlorodibenzo-p-dioxin	39227-53-7	D-101N	25 mg	D-101S	50 µg/mL	Isooctane	
2-Chlorodibenzo-p-dioxin	39227-54-8	D-102N	50 mg	D-102S	50 µg/mL	Isooctane	
Dibenzo-p-dioxin	262-12-4	D-100N	10 mg	D-100S	50 µg/mL	Isooctane	
1,2-Dichlorodibenzo-p-dioxin		-----	-----	D-207S	50 µg/mL	Isooctane	
1,3-Dichlorodibenzo-p-dioxin		D-205N	10 mg	D-205S	50 µg/mL	Isooctane	
1,4-Dichlorodibenzo-p-dioxin		D-206N	10 mg	D-206S	50 µg/mL	Isooctane	
1,6-Dichlorodibenzo-p-dioxin	38178-38-0	D-201N	5 mg	D-201S	50 µg/mL	Isooctane	
2,3-Dichlorodibenzo-p-dioxin	29446-15-9	D-202N	5 mg	D-202S	50 µg/mL	Isooctane	
2,7-Dichlorodibenzo-p-dioxin	33857-26-0	D-203N	25 mg	D-203S	50 µg/mL	Isooctane	
2,8-Dichlorodibenzo-p-dioxin		-----	-----	D-204S	50 µg/mL	Isooctane	
1,2,3-Trichlorodibenzo-p-dioxin	54536-17-3	D-301N	5 mg	D-301S	50 µg/mL	Isooctane	
1,2,4-Trichlorodibenzo-p-dioxin	39227-58-2	D-302N	10 mg	D-302S	50 µg/mL	Isooctane	
1,7,8-Trichlorodibenzo-p-dioxin	82306-65-8	D-303N	5 mg	D-303S	50 µg/mL	Isooctane	
2,3,7-Trichlorodibenzo-p-dioxin	33857-28-2	D-304N	5 mg	D-304S	50 µg/mL	Isooctane	
1,2,3,4-Tetrachlorodibenzo-p-dioxin	30746-58-8	D-401N	50 mg	D-401S	50 µg/mL	Toluene	
1,2,7,8-Tetrachlorodibenzo-p-dioxin	34816-53-0	D-402N	5 mg	D-402S	50 µg/mL	Toluene	
1,3,7,8-Tetrachlorodibenzo-p-dioxin	50585-46-1	D-403N	5 mg	D-403S	50 µg/mL	Toluene	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	D-404N	1 mg	APP-9-167	5 µg/mL	Toluene	
		-----	-----	M-613	10 µg/mL	Toluene	
		-----	-----	D-404S	50 µg/mL	Toluene	
1,3,6,8-Tetrachlorodibenzo-p-dioxin	33423-92-6	D-405N	5 mg	D-405S	50 µg/mL	Toluene	
1,2,8,9-Tetrachlorodibenzo-p-dioxin	116889-69-1	D-406N	5 mg	D-406S	50 µg/mL	Toluene	
1,3,7,9-Tetrachlorodibenzo-p-dioxin	116889-70-4	D-407N	5 mg	D-407S	50 µg/mL	Toluene	
1,2,6,8-Tetrachlorodibenzo-p-dioxin	67323-56-2	D-408N	1 mg	D-408S	50 µg/mL	Toluene	
1,2,6,7-Tetrachlorodibenzo-p-dioxin	41903-57-5	D-409N	5 mg	D-409S	50 µg/mL	Toluene	
1,2,3,4,7-Pentachlorodibenzo-p-dioxin	39227-61-7	D-503N	1 mg	D-503S	50 µg/mL	Toluene	
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321-76-4	D-501N	5 mg	APP-9-168	5 µg/mL	Toluene	
		-----	-----	D-501S	50 µg/mL	Toluene	
1,2,3,8,9-Pentachlorodibenzo-p-dioxin	71925-18-3	D-504N	1 mg	D-504S	50 µg/mL	Toluene	
1,2,4,7,8-Pentachlorodibenzo-p-dioxin	58802-08-7	D-502N	5 mg	D-502S	50 µg/mL	Toluene	
1,2,4,6,8/1,2,4,7,9-Pentachlorodibenzo-p-dioxin	71998-76-0/ 82291-37-0	D-505N	1 mg	D-505S	50 µg/mL	Toluene	
1,2,3,4,6,7-Hexachlorodibenzo-p-dioxin	58200-66-1	D-603N	1 mg	D-603S	50 µg/mL	Toluene	
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227-28-6	D-601N	5 mg	APP-9-169	5 µg/mL	Toluene	
		-----	-----	D-601S	50 µg/mL	Toluene	
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653-85-7	D-602N	1 mg	D-602S	50 µg/mL	Toluene	
1,2,4,6,7,9/1,2,4,6,8,9-Hexachlorodibenzo-p-dioxin	39227-62-8/ 58802-09-8	D-604N	1 mg	D-604S	50 µg/mL	Toluene	
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	D-605N	1 mg	D-605S	50 µg/mL	Toluene	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	D-701N	1 mg	D-701S	50 µg/mL	Toluene	
1,2,3,4,6,7,9-Heptachlorodibenzo-p-dioxin	58200-70-7	D-702N	5 mg	D-702S	50 µg/mL	Toluene	
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	D-801N	50 mg	D-801S	50 µg/mL	Toluene	

Brominated Dibenzo-p-Dioxins

Compound	Cat. No.	Conc.	Matrix	1 mL
1,3,7-Tribromodibenzo-p-dioxin	BDD-301S	10 µg/mL	Toluene	
	BDD-301S-2.5X	25 µg/mL	Toluene	
1,3,8-Tribromodibenzo-p-dioxin	BDD-302S	10 µg/mL	Toluene	
	BDD-302S-2.5X	25 µg/mL	Toluene	
1,2,3,7-Tetrabromodibenzo-p-dioxin	BDD-401S	10 µg/mL	Toluene	
	BDD-401S-2.5X	25 µg/mL	Toluene	
1,2,3,8-Tetrabromodibenzo-p-dioxin	BDD-402S	10 µg/mL	Toluene	
	BDD-402S-2.5X	25 µg/mL	Toluene	
Tetrabromodibenzo-p-dioxin-Mixed Isomers	BDD-403S	10 µg/mL	Toluene	
1,2,4,7-Tetrabromodibenzo-p-dioxin / 1,2,4,8-Tetrabromodibenzo-p-dioxin	BDD-403S-2.5X	25 µg/mL	Toluene	
2,3,7,8-Tetrabromodibenzo-p-dioxin	X-001	1 mg	NEAT	



Chlorodibenzo-p-dioxin Congeners

Canadian Method, Method 1613, 8280

Canadian Dioxin Mixtures

Custom Window Defining Mixture

D-WD	20,000 ng/mL in Toluene	1 x 1 mL
D-WD-2.5X	50,000 ng/mL in Toluene	1 x 1 mL
		7 comps.

1,2,4,6,8/1,2,4,7,9-Pentachlorodibenzo-p-dioxin (Isomer pair)
1,2,3,8,9-Pentachlorodibenzo-p-dioxin
1,2,4,6,7,9/1,2,4,6,8,9-Hexachlorodibenzo-p-dioxin (Isomer pair)
1,2,3,4,6,7-Hexachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin
1,2,3,4,6,7,9-Heptachlorodibenzo-p-dioxin
Octachlorodibenzo-p-dioxin

High Concentration
Low Cost

Custom Calibration Mixture

D-CAL	20,000 ng/mL in Toluene	1 x 1 mL
D-CAL-2.5X	50,000 ng/mL in Toluene	1 x 1 mL
		6 comps.

1,2,3,7,8-Pentachlorodibenzo-p-dioxin
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin
Octachlorodibenzo-p-dioxin

Standards of Interest

For more Canadian Methods see International Regional Section

Method 8280A Dioxins & Furans by HRGC/LRMS

Dioxin Mixture

M-8280A		1 x 1 mL
M-8280A-PAK	SAVE	5 x 1 mL
		5 comps.

2,3,7,8-Tetrachlorodibenzo-p-dioxin
1,2,3,7,8-Pentachlorodibenzo-p-dioxin
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin
Octachlorodibenzo-p-dioxin

Furan Mixture

M-8280B		1 x 1 mL
M-8280B-PAK	SAVE	5 x 1 mL
		5 comps.

2,3,7,8-Tetrachlorodibenzofuran
1,2,3,7,8-Pentachlorodibenzofuran
1,2,3,4,7,8-Hexachlorodibenzofuran
1,2,3,4,6,7,8-Heptachlorodibenzofuran
Octachlorodibenzofuran

Column Performance Check

M-8280-CPC		1 x 1 mL
M-8280-CPC-PAK	SAVE	5 x 1 mL
		7 comps.

1,2,3,4-Tetrachlorodibenzo-p-dioxin
2,3,7,8-Tetrachlorodibenzo-p-dioxin
1,2,3,4,7-Pentachlorodibenzo-p-dioxin
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin
2,3,7,8-Tetrachlorodibenzofuran

Method 1613 Dioxins & Furans by HRGC/HRMS

Method 1613 Precision and Recovery Standard

M-1613-PAR Bold (-04)		1 x 1 mL
M-1613-PAR-PAK	SAVE	5 x 1 mL
		17 comps.

All units in ng/mL in Nonane

Calibration Set

M-1613-CAL-SET (-01,-02,-03,-04,-05)		5 x 1 mL
--------------------------------------	--	----------

M-1613-CAL	-01	-02	-03	-04	-05
2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.5	2	10	40	200
2,3,7,8-Tetrachlorodibenzofuran	0.5	2	10	40	200
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	2.5	10	50	200	1000
1,2,3,7,8-Pentachlorodibenzofuran	2.5	10	50	200	1000
2,3,4,7,8-Pentachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	2.5	10	50	200	1000
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	2.5	10	50	200	1000
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	2.5	10	50	200	1000
1,2,3,4,7,8-Hexachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,6,7,8-Hexachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,7,8,9-Hexachlorodibenzofuran	2.5	10	50	200	1000
2,3,4,6,7,8-Hexachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	2.5	10	50	200	1000
1,2,3,4,6,7,8-Heptachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,4,7,8,9-Heptachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	5	20	100	400	2000
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	5	20	100	400	2000

2,3,7,8 Isomers only Mix

This solution is for those labs only determining the concentration of the two most toxic isomers.

M-1613-DF		1 x 1 mL
		2 comps.

40 ng/mL each in Nonane

2,3,7,8-Tetrachlorodibenzo-p-dioxin
2,3,7,8-Tetrachlorodibenzofuran

Technical Note

These native solutions of the USEPA Method 1613 analytes can also be used for USEPA Method 23, 8280, 8290, EU Method EN-1948 and Japanese Methods JIS-K0311 and K0312.

Minimum purity 98%

Chlorinated Dibenzofuran Congeners

Compound	CAS No.	NEAT Cat. No.	Unit	SOLUTION Cat. No.	Conc.	Solvent	1 mL
Dibenzofuran	132-64-9	F-100N	50 mg	F-100S	50 µg/mL	Isooctane	
		-----	-----	APP-9-059	100 µg/mL	MeOH	
		-----	-----	APP-9-059-2X	200 µg/mL	MeOH	
		-----	-----	AS-E0261	5 mg/mL	MeOH	
2-Chlorodibenzofuran	51230-49-0	-----	-----	F-102S	50 µg/mL	Isooctane	
4-Chlorodibenzofuran	74992-96-4	-----	-----	F-104S	50 µg/mL	Isooctane	
2,8-Dichlorodibenzofuran	5409-83-6	F-201N	10 mg	F-201S	50 µg/mL	Isooctane	
2,4,8-Trichlorodibenzofuran	54589-71-8	-----	-----	F-301S	50 µg/mL	Isooctane	
1,2,3,4-Tetrachlorodibenzofuran	24478-72-6	-----	-----	F-401S	50 µg/mL	Toluene	
1,3,6,8-Tetrachlorodibenzofuran	30402-14-3	-----	-----	F-403S	50 µg/mL	Toluene	
2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	F-402N	1 mg	APP-9-170	5 µg/mL	Toluene	
				F-402S	50 µg/mL	Toluene	
1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	-----	-----	APP-9-171	5 µg/mL	Toluene	
2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	-----	-----	F-502S-0.1X	5 µg/mL	Toluene	
1,2,3,4,7,8-Hexachlorodibenzofuran	55684-94-1	-----	-----	APP-9-172	5 µg/mL	Toluene	
1,2,3,4,6,7,8-Heptachlorodibenzofuran	38998-75-3	-----	-----	F-701S-0.1X	5 µg/mL	Toluene	
				F-701S	50 µg/mL	Toluene	
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	F-801N	50 mg	F-801S	50 µg/mL	Toluene	
3-Nitrodibenzofuran	5410-97-9	R-009N	5 mg	R-009S	100 µg/mL	Toluene	

Custom Synthesized Rare Chemicals

Neat Compounds, except as noted	CAS No.	Cat. No.	Unit
2-Amino-7,8-dibromo-dibenzo-p-dioxin	Solution	X-011	1 mL
	0.1 mg/mL in Toluene		
4-Chlorophenyl methyl sulfoxide	934-73-6	X-004	10 mg
4,6-Dinitro-o-toluidine	7477-94-3	X-002	10 mg
1,4-Dioxino(2,3-b:5,6-b')dipyridine (Dipyridine analog of dibenzo-p-dioxin)	262-16-8	X-005	5 mg
<i>n,n'</i> -bis(4-Isopropylphenyl)urea	113260-74-5	X-012	10 mg
9-Methylacridine	611-64-3	X-008	10 mg
2,3,7,8-Tetrabromodibenzo-p-dioxin	50585-41-6	X-001	1 mg
3,3',4,4'-Tetrachloroazobenzene	14047-09-7	X-009	10 mg
3,3',4,4'-Tetrachloroazoxybenzene	21232-47-3	X-010	10 mg
<i>N,N'</i> -bis(2,4,6-Trichlorophenyl)urea	20632-35-3	X-003	10 mg



Custom Services

Custom Synthesis

The AccuStandard Synthesis Department employs several PhD. Organic Chemists with many years of pertinent academic and industrial experience. The experienced staff has developed hundreds of pure chemical compounds for companies and governmental agencies around the world. The very well-equipped synthetic laboratory with significant analytical support has made many notable synthesis projects possible. We specialize in synthesizing chemicals of high purity to be used as reference standards, and also offer custom synthesis capability on milligram to kilogram scales.



Analytical Capabilities

- GC-MS, GC-FID, GC-ECD, GC-NPD
- HPLC, LC-MS
- ICP, ICP-MS
- access to more analytical instrumentation if necessary

Synthesis and Purification

- Milligram to Kilogram Glassware
- Inert Conditions Equipment
- High Performance Flash Chromatography
- Distillation Equipment - High Vacuum, Molecular (Kugelrohr), and Spinning Band Columns Preparative TLC
- Parr Pressure and Hydrogenation Reactor

Custom Synthesized Products

- PCBs (all 209 congeners), & hydroxy, methoxy, and methylsulfonyl metabolites
- Halo-Dibenzodioxins and Furans
- PBDEs (all 209 congeners) & hydroxy, methoxy, chloro metabolites
- Fluorinated PBDEs
- Other Brominated Flame Retardants
- PBBs
- PAHs, Nitro-PAHs, Methyl-PAHs
- Pesticides and metabolites
- Explosives and metabolites
- Nonyl- and Octylphenol Ethoxylates
- Mono- and Diester Phthalates
- Organophosphates
- Other Rare Chemicals

AccuStandard is renowned for its quick response to the needs for new compounds. The company's especially strong Synthesis Department allows the synthesis of important and unique products. Featured in its history of firsts are all of the 209 congeners of polychlorinated biphenyls (PCBs), 209 congeners of polybrominated diphenyl ethers (PBDEs) as well as many halogenated dioxins and dibenzofurans, PAHs, pesticides and fluorinated surrogates substituting the expensive isotopically labelled compounds.

Among the more recent introductions are the hydroxy and methoxy PBDE congeners, mixed bromo/chloro hydroxy and methoxy diphenyl ethers, organophosphate flame retardants, biofuels, plastic additives (AccuStandard authored the Handbook for the Chemical Analysis of Plastic and Polymer Additives published by CRC Press), EPA Method 535 pesticide derivatives and previously unavailable explosive standards.

Custom Formulations

With over 30,000+ custom and 10,000+ listed standards, there is a good chance that AccuStandard will have a standard to meet your needs. However, if your laboratory requires something specific, our Chemists will manufacture a Custom Standard to meet your unique requirements. Custom Standards are an economical and time saving way to have a Standard prepared for your individual needs.

Custom QC options

1. Gravimetric/Volumetric Certification: Each purity is measured gravimetrically and QC verified instrumentally (where available). Every component in the Standard is guaranteed to be within +/- 0.5% of the requested value unless otherwise stated on the Certificate of Analysis. The solutions are diluted to volume using Class A glassware. A Certificate of Analysis accompanies each Standard and documents the gravimetric values used.
2. Full Quantitative Certification: This QA/QC method includes extended GC analysis using both internal calibration standards plus statistical analysis. A data package containing analytical and gravimetric data can be provided if requested during the quotation phase (Organic Customs only).



Custom Packaging and Bulk Quantity Requirements

AccuStandard has the resources and equipment to meet your custom packaging requirements.

- Automated ampule filling & sealing 0.2 mL up to 20 mL and ampule sizes from 1 mL to 20 mL
- Quantities from 500 to over 500,000 ampules
- Homogeneity testing
- Amber ampules for added product stability
- Private labeling and packaging (OEM)

We can reduce your costs using the Cozzoli Auto Filling/Sealing Machine to package just the right size product for your application. OEM Standards - Privately labeled standards manufactured and tested to your specifications. Cold and under Nitrogen sealing available.





Table of Contents

PBDE Congeners All 209	26-28
Tech Grade PBDEs	29
PBDE Mixtures	29
ISO/DIS 22032 Calibration Curve	29
EPA Method 1614	30
PBDE Metabolites 25 NEW	31-32
PBCDE Metabolites NEW	32
Fluorinated PBDE Congeners	33
HBCD Isomers	34
Bromobiphenyl Congeners	34
Bromophenols	35
Bromoanisoles	35
Industrial Flame Retardants	36-38
Bromine Containing FRs	36
More Commercial Grade & Pure BFRs	37
Organophosphate FRs (PFRs) NEW	38
Chlorine Containing FRs	38

Brominated Flame Retardants (BFRs), such as polybrominated diphenyl ethers (PBDEs), have become global environmental contaminants because of their widespread use in numerous household and commercial products. They have been detected in sediments, biota, house dust, sewage sludge, air, water samples, and human and wildlife tissues. In the past years, an impressive amount of information has been gained on the persistence, bioaccumulative and toxic properties of PBDEs.

Some PBDEs break down further in the environment and in biota to other congeners or analogues. AccuStandard has synthesized all of the 209 possible congeners and over 80 of their hydroxy and methoxy metabolites. AccuStandard offers a wide variety of PBDE mixtures and calibration sets which are designed for US EPA and International PBDE monitoring.

The industrial production of the technical penta-BDE mixtures is to be eliminated under the Stockholm Convention of 2001 because of their toxicity and persistence. Technical octa-BDE mixtures have been banned by the EU since 2004. In the USA the ban of this group of BDEs has been implemented since 2007.

There are many other brominated compounds in use as alternatives to the PBDE flame retardants. Selected substances of these industrial BFRs are monitored by the international community for their environmental impact. AccuStandard offers a number of these compounds to assist these monitoring efforts. Degradation products and metabolites of these "emerging" BFRs are of increasing interest. AccuStandard has been synthesizing these compounds upon request and continues to add them to the product line. Examples are 2,3,4,5-tetrabromobenzoic acid, a degradation product of di(2-ethylhexyl)tetrabromophthalate, and dimethyl- and diglycidyl ethers of both tetrabromobisphenol A and tetrabromobisphenol S. AccuStandard offers some flame retardants like Hexabromocyclododecane (HBCD) and Dechlorane Plus as technical mixtures and their major isomers in pure form.

As with the BFRs, the widespread use of organophosphate flame retardants (OP-FRs) has raised concerns about their impact on the environment, human and animal health. Analysis of indoor air and dust has shown that the concentration of OP-FRs appear to be higher than that of PBDEs. To aid in the on-going toxicological and environmental studies of these compounds AccuStandard is providing a number of the most widely used OP-FRs for use as reference standards.

Upon special request compounds can be offered in various concentrations and mixes or as neat materials. Custom standards are an economical and time saving way to have a standard prepared for your individual needs. To make an online Custom Quotes Request, go to AccuStandard.com.



Polybrominated Diphenyl Ether (PBDE) Congeners

Polybrominated Diphenyl Ethers (PBDEs) Congeners

Compound	CAS No.	Conc.	Solvent	Cat. No.	1 mL
2-Bromodiphenyl ether	7025-06-1	50 µg/mL	Isooctane	BDE-001S	
3-Bromodiphenyl ether	6876-00-2	50 µg/mL	Isooctane	BDE-002S	
4-Bromodiphenyl ether	101-55-3	50 µg/mL	Isooctane	BDE-003S	
2,2'-Dibromodiphenyl ether	51452-87-0	50 µg/mL	Isooctane	BDE-004S	
2,3-Dibromodiphenyl ether	446254-14-4	50 µg/mL	Isooctane	BDE-005S	
2,3'-Dibromodiphenyl ether	147217-72-9	50 µg/mL	Isooctane	BDE-006S	
2,4-Dibromodiphenyl ether	171977-44-9	50 µg/mL	Isooctane	BDE-007S	
2,4'-Dibromodiphenyl ether	147217-71-8	50 µg/mL	Isooctane	BDE-008S	
2,5-Dibromodiphenyl ether	33513-66-3	50 µg/mL	Isooctane	BDE-009S	
2,6-Dibromodiphenyl ether	51930-04-2	50 µg/mL	Isooctane	BDE-010S	
3,3'-Dibromodiphenyl ether	6903-63-5	50 µg/mL	Isooctane	BDE-011S	
3,4-Dibromodiphenyl ether	189084-59-1	50 µg/mL	Isooctane	BDE-012S	
3,4'-Dibromodiphenyl ether	83694-71-7	50 µg/mL	Isooctane	BDE-013S	
3,5-Dibromodiphenyl ether	46438-88-4	50 µg/mL	Isooctane	BDE-014S	
4,4'-Dibromodiphenyl ether	2050-47-7	50 µg/mL	Isooctane	BDE-015S	
2,2',3-Tribromodiphenyl ether	147217-74-1	50 µg/mL	Isooctane	BDE-016S	
2,2',4-Tribromodiphenyl ether	147217-75-2	50 µg/mL	Isooctane	BDE-017S	
2,2',5-Tribromodiphenyl ether	407606-55-7	50 µg/mL	Isooctane	BDE-018S	
2,2',6-Tribromodiphenyl ether	147217-73-0	50 µg/mL	Isooctane	BDE-019S	
2,3,3'-Tribromodiphenyl ether	147217-76-3	50 µg/mL	Isooctane	BDE-020S	
2,3,4-Tribromodiphenyl ether	337513-67-4	50 µg/mL	Isooctane	BDE-021S	
2,3,4'-Tribromodiphenyl ether	446254-15-5	50 µg/mL	Isooctane	BDE-022S	
2,3,5-Tribromodiphenyl ether	446254-16-6	50 µg/mL	Isooctane	BDE-023S	
2,3,6-Tribromodiphenyl ether		50 µg/mL	Isooctane	BDE-024S	
2,3',4-Tribromodiphenyl ether	147217-77-4	50 µg/mL	Isooctane	BDE-025S	
2,3',5-Tribromodiphenyl ether	337513-75-4	50 µg/mL	Isooctane	BDE-026S	
2,3',6-Tribromodiphenyl ether	337513-53-8	50 µg/mL	Isooctane	BDE-027S	
2,4,4'-Tribromodiphenyl ether	41318-75-6	50 µg/mL	Isooctane	BDE-028S	
2,4,5-Tribromodiphenyl ether	337513-56-1	50 µg/mL	Isooctane	BDE-029S	
2,4,6-Tribromodiphenyl ether	155999-95-4	50 µg/mL	Isooctane	BDE-030S	
2,4',5-Tribromodiphenyl ether	65075-08-3	50 µg/mL	Isooctane	BDE-031S	
2,4',6-Tribromodiphenyl ether	189084-60-4	50 µg/mL	Isooctane	BDE-032S	
2',3,4-Tribromodiphenyl ether	147217-78-5	50 µg/mL	Isooctane	BDE-033S	
2',3,5-Tribromodiphenyl ether	446254-17-7	50 µg/mL	Isooctane	BDE-034S	
3,3',4-Tribromodiphenyl ether	147217-80-9	50 µg/mL	Isooctane	BDE-035S	
3,3',5-Tribromodiphenyl ether	147217-79-6	50 µg/mL	Isooctane	BDE-036S	
3,4,4'-Tribromodiphenyl ether	147217-81-0	50 µg/mL	Isooctane	BDE-037S	
3,4,5-Tribromodiphenyl ether	337513-54-9	50 µg/mL	Isooctane	BDE-038S	
3,4',5-Tribromodiphenyl ether		50 µg/mL	Isooctane	BDE-039S	
2,2',3,3'-Tetrabromodiphenyl ether		50 µg/mL	Isooctane	BDE-040S	
2,2',3,4-Tetrabromodiphenyl ether	337513-68-5	50 µg/mL	Isooctane	BDE-041S	
2,2',3,4'-Tetrabromodiphenyl ether	446254-18-8	50 µg/mL	Isooctane	BDE-042S	
2,2',3,5-Tetrabromodiphenyl ether	446254-19-9	50 µg/mL	Isooctane	BDE-043S	
2,2',3,5'-Tetrabromodiphenyl ether	446254-20-2	50 µg/mL	Isooctane	BDE-044S	
2,2',3,6-Tetrabromodiphenyl ether		50 µg/mL	Isooctane	BDE-045S	
2,2',3,6'-Tetrabromodiphenyl ether	446254-22-4	50 µg/mL	Isooctane	BDE-046S	
2,2',4,4'-Tetrabromodiphenyl ether	5436-43-1	50 µg/mL	Isooctane	BDE-047S	
2,2',4,5-Tetrabromodiphenyl ether	337513-55-0	50 µg/mL	Isooctane	BDE-048S	
2,2',4,5'-Tetrabromodiphenyl ether	243982-82-3	50 µg/mL	Isooctane	BDE-049S	
2,2',4,6-Tetrabromodiphenyl ether	446254-23-5	50 µg/mL	Isooctane	BDE-050S	
2,2',4,6'-Tetrabromodiphenyl ether	189084-57-9	50 µg/mL	Isooctane	BDE-051S	
2,2',5,5'-Tetrabromodiphenyl ether	446254-24-6	50 µg/mL	Isooctane	BDE-052S	
2,2',5,6-Tetrabromodiphenyl ether	446254-25-7	50 µg/mL	Isooctane	BDE-053S	
2,2',6,6'-Tetrabromodiphenyl ether		50 µg/mL	Isooctane	BDE-054S	
2,3,3',4-Tetrabromodiphenyl ether	40088-47-9	50 µg/mL	Isooctane	BDE-055S	
2,3,3',4'-Tetrabromodiphenyl ether		50 µg/mL	Isooctane	BDE-056S	
2,3,3',5-Tetrabromodiphenyl ether		50 µg/mL	Isooctane	BDE-057S	
2,3,3',5'-Tetrabromodiphenyl ether		50 µg/mL	Isooctane	BDE-058S	
2,3,3',6-Tetrabromodiphenyl ether		50 µg/mL	Isooctane	BDE-059S	
2,3,4,4'-Tetrabromodiphenyl ether	446254-31-5	50 µg/mL	Isooctane	BDE-060S	
2,3,4,5-Tetrabromodiphenyl ether	446254-32-6	50 µg/mL	Isooctane	BDE-061S	
2,3,4,6-Tetrabromodiphenyl ether	446254-33-7	50 µg/mL	Isooctane	BDE-062S	
2,3,4',5-Tetrabromodiphenyl ether	446254-34-8	50 µg/mL	Isooctane	BDE-063S	
2,3,4',6-Tetrabromodiphenyl ether		50 µg/mL	Isooctane	BDE-064S	
2,3,5,6-Tetrabromodiphenyl ether		50 µg/mL	Isooctane	BDE-065S	
2,3',4,4'-Tetrabromodiphenyl ether	189084-61-5	50 µg/mL	Isooctane	BDE-066S	
2,3',4,5-Tetrabromodiphenyl ether	446254-37-1	50 µg/mL	Isooctane	BDE-067S	
2,3',4,5'-Tetrabromodiphenyl ether	446254-38-2	50 µg/mL	Isooctane	BDE-068S	
2,3',4,6-Tetrabromodiphenyl ether	327185-09-1	50 µg/mL	Isooctane	BDE-069S	
2,3',4',5-Tetrabromodiphenyl ether	446254-39-3	50 µg/mL	Isooctane	BDE-070S	
2,3',4',6-Tetrabromodiphenyl ether	189084-62-6	50 µg/mL	Isooctane	BDE-071S	
2,3',5,5'-Tetrabromodiphenyl ether	446254-40-6	50 µg/mL	Isooctane	BDE-072S	
2,3',5,6-Tetrabromodiphenyl ether	446254-41-7	50 µg/mL	Isooctane	BDE-073S	
2,4,4',5-Tetrabromodiphenyl ether	446254-42-8	50 µg/mL	Isooctane	BDE-074S	
2,4,4',6-Tetrabromodiphenyl ether	189084-63-7	50 µg/mL	Isooctane	BDE-075S	

Technical Note

For specific applications (e.g. toxicological studies) that require absolute dioxin and furan free PBDEs, contact Technical Service.

Polybrominated Diphenyl Ether (PBDE) Congeners



Polybrominated Diphenyl Ethers (PBDEs) Congeners

Compound	CAS No.	Conc.	Solvent	Cat. No.	1 mL
2,3,4,5-Tetrabromodiphenyl ether	446254-43-9	50 µg/mL	Isooctane	BDE-076S	
3,3',4,4'-Tetrabromodiphenyl ether	93703-48-1	50 µg/mL	Isooctane	BDE-077S	
3,3',4,5-Tetrabromodiphenyl ether	446254-45-1	50 µg/mL	Isooctane	BDE-078S	
3,3',4,5'-Tetrabromodiphenyl ether	446254-48-4	50 µg/mL	Isooctane	BDE-079S	
3,3',5,5'-Tetrabromodiphenyl ether	103173-66-6	50 µg/mL	Isooctane	BDE-080S	
3,4,4',5-Tetrabromodiphenyl ether	446254-50-8	50 µg/mL	Isooctane	BDE-081S	
2,2',3,3',4-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-082S	
2,2',3,3',5-Pentabromodiphenyl ether	446254-51-9	50 µg/mL	Isooctane	BDE-083S	
2,2',3,3',6-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-084S	
2,2',3,4,4'-Pentabromodiphenyl ether	182346-21-0	50 µg/mL	Isooctane	BDE-085S	
2,2',3,4,5-Pentabromodiphenyl ether	446254-53-1	50 µg/mL	Isooctane	BDE-086S	
2,2',3,4,5'-Pentabromodiphenyl ether	446254-54-2	50 µg/mL	Isooctane	BDE-087S	
2,2',3,4,6-Pentabromodiphenyl ether	446254-55-3	50 µg/mL	Isooctane	BDE-088S	
2,2',3,4,6'-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-089S	
2,2',3,4',5-Pentabromodiphenyl ether	446254-57-5	50 µg/mL	Isooctane	BDE-090S	
2,2',3,4',6-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-091S	
2,2',3,5,5'-Pentabromodiphenyl ether	446254-59-7	50 µg/mL	Isooctane	BDE-092S	
2,2',3,5,6-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-093S	
2,2',3,5,6'-Pentabromodiphenyl ether	446254-61-1	50 µg/mL	Isooctane	BDE-094S	
2,2',3,5',6-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-095S	
2,2',3,6,6'-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-096S	
2,2',3',4,5-Pentabromodiphenyl ether	446254-64-4	50 µg/mL	Isooctane	BDE-097S	
2,2',3',4,6-Pentabromodiphenyl ether	38463-82-0	50 µg/mL	Isooctane	BDE-098S	
2,2',4,4',5-Pentabromodiphenyl ether	60348-60-9	50 µg/mL	Isooctane	BDE-099S	
2,2',4,4',6-Pentabromodiphenyl ether	189084-64-8	50 µg/mL	Isooctane	BDE-100S	
2,2',4,5,5'-Pentabromodiphenyl ether	446254-65-5	50 µg/mL	Isooctane	BDE-101S	
2,2',4,5,6'-Pentabromodiphenyl ether	446254-66-6	50 µg/mL	Isooctane	BDE-102S	
2,2',4,5',6-Pentabromodiphenyl ether	446254-67-7	50 µg/mL	Isooctane	BDE-103S	
2,2',4,6,6'-Pentabromodiphenyl ether	446254-68-8	50 µg/mL	Isooctane	BDE-104S	
2,3,3',4,4'-Pentabromodiphenyl ether	373594-78-6	50 µg/mL	Isooctane	BDE-105S	
2,3,3',4,5-Pentabromodiphenyl ether	446254-69-9	50 µg/mL	Isooctane	BDE-106S	
2,3,3',4',5-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-107S	
2,3,3',4,5'-Pentabromodiphenyl ether	446254-71-3	50 µg/mL	Isooctane	BDE-108S	
2,3,3',4,6-Pentabromodiphenyl ether	446254-72-4	50 µg/mL	Isooctane	BDE-109S	
2,3,3',4',6-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-110S	
2,3,3',5,5'-Pentabromodiphenyl ether	446254-74-6	50 µg/mL	Isooctane	BDE-111S	
2,3,3',5,6-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-112S	
2,3,3',5',6-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-113S	
2,3,4,4',5-Pentabromodiphenyl ether	446254-77-9	50 µg/mL	Isooctane	BDE-114S	
2,3,4,4',6-Pentabromodiphenyl ether	446254-78-0	50 µg/mL	Isooctane	BDE-115S	
2,3,4,5,6-Pentabromodiphenyl ether	189084-65-9	50 µg/mL	Isooctane	BDE-116S	
2,3,4',5,6-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-117S	
2,3',4,4',5-Pentabromodiphenyl ether	446254-80-4	50 µg/mL	Isooctane	BDE-118S	
2,3',4,4',6-Pentabromodiphenyl ether	189084-66-0	50 µg/mL	Isooctane	BDE-119S	
2,3',4,5,5'-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-120S	
2,3',4,5',6-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-121S	
2',3,3',4,5-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-122S	
2',3,4,4',5-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-123S	
2',3,4,5,5'-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-124S	
2',3,4,5,6'-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-125S	
3,3',4,4',5-Pentabromodiphenyl ether	366791-32-4	50 µg/mL	Isooctane	BDE-126S	
3,3',4,5,5'-Pentabromodiphenyl ether		50 µg/mL	Isooctane	BDE-127S	
2,2',3,3',4,4'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-128S	
2,2',3,3',4,5-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-129S	
2,2',3,3',4,5'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-130S	
2,2',3,3',4,6-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-131S	
2,2',3,3',4,6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-132S	
2,2',3,3',5,5'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-133S	
2,2',3,3',5,6-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-134S	
2,2',3,3',5,6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-135S	
2,2',3,3',6,6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-136S	
2,2',3,4,4',5-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-137S	
2,2',3,4,4',5'-Hexabromodiphenyl ether	182677-30-1	50 µg/mL	Isooctane	BDE-138S	
2,2',3,4,4',6-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-139S	
2,2',3,4,4',6'-Hexabromodiphenyl ether	243982-83-4	50 µg/mL	Isooctane	BDE-140S	
2,2',3,4,5,5'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-141S	
2,2',3,4,5,6-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-142S	
2,2',3,4,5,6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-143S	
2,2',3,4,5',6-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-144S	
2,2',3,4,6,6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-145S	
2,2',3,4',5,5'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-146S	
2,2',3,4',5,6-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-147S	
2,2',3,4',5,6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-148S	
2,2',3,4',5',6-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-149S	
2,2',3,4',6,6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-150S	

PBDE Congeners continued on next page



PBDE Congeners



Polybrominated Diphenyl Ether (PBDE) Congeners

Polybrominated Diphenyl Ethers (PBDEs) Congeners

Compound	CAS No.	Conc.	Solvent	Cat. No.	1 mL
2,2',3,5,5',6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-151S	
2,2',3,5,6,6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-152S	
2,2',4,4',5,5'-Hexabromodiphenyl ether	68631-49-2	50 µg/mL	Isooctane	BDE-153S	
2,2',4,4',5,6'-Hexabromodiphenyl ether	207122-15-4	50 µg/mL	Isooctane	BDE-154S	
2,2',4,4',6,6'-Hexabromodiphenyl ether	35854-94-5	50 µg/mL	Isooctane	BDE-155S	
2,3,3',4,4',5'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-156S	
2,3,3',4,4',5'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-157S	
2,3,3',4,4',6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-158S	
2,3,3',4,5,5'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-159S	
2,3,3',4,5,6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-160S	
2,3,3',4,5',6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-161S	
2,3,3',4',5,5'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-162S	
2,3,3',4',5,6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-163S	
2,3,3',4',5',6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-164S	
2,3,3',5,5',6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-165S	
2,3,4,4',5,6'-Hexabromodiphenyl ether	189084-58-0	50 µg/mL	Isooctane	BDE-166S	
2,3',4,4',5,5'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-167S	
2,3',4,4',5',6'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-168S	
3,3',4,4',5,5'-Hexabromodiphenyl ether		50 µg/mL	Isooctane	BDE-169S	
2,2',3,3',4,4',5'-Heptabromodiphenyl ether	327185-13-7	50 µg/mL	Isooctane	BDE-170S	
2,2',3,3',4,4',6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-171S	
2,2',3,3',4,5,5'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-172S	
2,2',3,3',4,5,6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-173S	
2,2',3,3',4,5,6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-174S	
2,2',3,3',4,5',6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-175S	
2,2',3,3',4',6,6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-176S	
2,2',3,3',4',5,6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-177S	
2,2',3,3',5,5',6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-178S	
2,2',3,3',5,6,6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-179S	
2,2',3,4,4',5,5'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-180S	
2,2',3,4,4',5,6'-Heptabromodiphenyl ether	189084-67-1	50 µg/mL	Isooctane	BDE-181S	
2,2',3,4,4',5',6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-182S	
2,2',3,4,4',5',6'-Heptabromodiphenyl ether	207122-16-5	50 µg/mL	Isooctane	BDE-183S	
2,2',3,4,4',6,6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-184S	
2,2',3,4,5,5',6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-185S	
2,2',3,4,5,6,6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-186S	
2,2',3,4',5,5',6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-187S	
2,2',3,4',5,6,6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-188S	
2,3,3',4,4',5,5'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-189S	
2,3,3',4,4',5,6'-Heptabromodiphenyl ether	189084-68-2	50 µg/mL	Isooctane	BDE-190S	
2,3,3',4,4',5',6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-191S	
2,3,3',4,5,5',6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-192S	
2,3,3',4',5,5',6'-Heptabromodiphenyl ether		50 µg/mL	Isooctane	BDE-193S	
2,2',3,3',4,4',5,5'-Octabromodiphenyl ether		50 µg/mL	Isooctane	BDE-194S	
2,2',3,3',4,4',5,6'-Octabromodiphenyl ether		50 µg/mL	Isooctane	BDE-195S	
2,2',3,3',4,4',5,6'-Octabromodiphenyl ether		50 µg/mL	Isooctane	BDE-196S	
2,2',3,3',4,4',6,6'-Octabromodiphenyl ether		50 µg/mL	Isooctane	BDE-197S	
2,2',3,3',4,5,5',6'-Octabromodiphenyl ether		50 µg/mL	Isooctane	BDE-198S	
2,2',3,3',4,5,5',6'-Octabromodiphenyl ether		25 µg/mL	Isooctane	BDE-199S-0.5X	
2,2',3,3',4,5,6,6'-Octabromodiphenyl ether		25 µg/mL	Isooctane	BDE-200S-0.5X	
2,2',3,3',4,5',6,6'-Octabromodiphenyl ether		50 µg/mL	Isooctane	BDE-201S	
2,2',3,3',5,5',6,6'-Octabromodiphenyl ether		50 µg/mL	Isooctane	BDE-202S	
2,2',3,4,4',5,5',6'-Octabromodiphenyl ether	337513-72-1	50 µg/mL	Isooctane	BDE-203S	
2,2',3,4,4',5,6,6'-Octabromodiphenyl ether		50 µg/mL	Isooctane	BDE-204S	
2,3,3',4,4',5,5',6'-Octabromodiphenyl ether	446255-56-7	50 µg/mL	Isooctane	BDE-205S	
2,2',3,3',4,4',5,5',6'-Nonabromodiphenyl ether	63387-28-0	50 µg/mL	Isooctane	BDE-206S	
2,2',3,3',4,4',5,6,6'-Nonabromodiphenyl ether	437701-79-6	50 µg/mL	Isooctane	BDE-207S-R1	
2,2',3,3',4,5,5',6,6'-Nonabromodiphenyl ether		50 µg/mL	Isooctane	BDE-208S	
Decabromodiphenyl ether	1163-19-5	50 µg/mL	Isooctane:	BDE-209S	
				Toluene (90:10)	
Internal Standard Short Form (4'-CL-BDE-208)					
4'-Chloro-2,2',3,3',4,5,5',6,6'-Nonabromodiphenyl ether	NEW	10 µg/mL	Isooctane	CBDE-001S-0.2X	
		50 µg/mL	Isooctane	CBDE-001S	



Polybrominated Diphenyl Ether (PBDE)

Tech Grade PBDEs, Specific Mixes & Calibration Curve



Technical Grade PBDEs

PBDE Technical Grade

50 µg/mL in Isooctane	Cat. No.	1 mL
Bromkal™ DE-70-5 (Pentas)	BDE-705	
Bromkal DE-71 (Pentas)	BDE-710	
Bromkal DE-73-6 (Hexas)	BDE-736	
Bromkal DE-79-8 (Octas)	BDE-798	
FR-300BA (Deca)	FRS-009N	/ 10 mg
100 µg/mL in Toluene	FRS-009S	

Bromkal™ is a registered Trade Mark of Chemische Fabrik Kalk

PBDE Congeners common to Technical Mixtures (Bromkal™)

BDE-BROMKAL	1 x 1 mL
10 µg/mL each in Isooctane	6 comps.
2,4,4'-Tribromodiphenyl ether (#28)	
2,2',4,4'-Tetrabromodiphenyl ether (#47)	
2,2',4,4',5-Pentabromodiphenyl ether (#99)	
2,2',4,4',6-Pentabromodiphenyl ether (#100)	
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	

DE-71 (Pentas) Great Lakes

BDE-710-GL	1 x 1 mL
50 µg/mL each in Isooctane	
Bromkal DE-71	

DE-79 (Octas) Great Lakes

BDE-798-GL	1 x 1 mL
50 µg/mL each in Isooctane	
DE-79 (Great Lakes)	

Specific Mixtures

PBDEs Common in the Environment

BDE-USE	1 x 1 mL
10 µg/mL each in Isooctane	5 comps.
2,2',4,4'-Tetrabromodiphenyl ether (#47)	
2,2',4,4',5-Pentabromodiphenyl ether (#99)	
2,2',4,4',6-Pentabromodiphenyl ether (#100)	
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	

PBDEs - Columbia River Study

BDE-CR	1 x 1 mL
10 µg/mL each in Isooctane	12 comps.
4,4'-Dibromodiphenyl ether (#15)	
2,4,4'-Tribromodiphenyl ether (#28)	
2',3,4-Tribromodiphenyl ether (#33)	
2,2',4,4'-Tetrabromodiphenyl ether (#47)	
2,2',4,5'-Tetrabromodiphenyl ether (#49)	
2,3',4,4'-Tetrabromodiphenyl ether (#66)	
2,4,4',6-Tetrabromodiphenyl ether (#75)	
2,2',4,4',5-Pentabromodiphenyl ether (#99)	
2,2',4,4',6-Pentabromodiphenyl ether (#100)	
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	
2,2',4,4',6,6'-Hexabromodiphenyl ether (#155)	

PBDEs Common to California Environment

BDE-CAE-1	1 x 1 mL
10 µg/mL each in Isooctane	7 comps.
2,4,4'-Tribromodiphenyl ether (#28)	
2',3,4-Tribromodiphenyl ether (#33)	
2,2',4,4'-Tetrabromodiphenyl ether (#47)	
2,2',4,4',5-Pentabromodiphenyl ether (#99)	
2,2',4,4',6-Pentabromodiphenyl ether (#100)	
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	

PBDEs - Lake Michigan Study

BDE-LMS	1 x 1 mL
10 µg/mL each in Isooctane	9 comps.
2,4,4'-Tribromodiphenyl ether (#28)	
2,2',4,4'-Tetrabromodiphenyl ether (#47)	
2,3',4,4'-Tetrabromodiphenyl ether (#66)	
2,2',3,4,4'-Pentabromodiphenyl ether (#85)	
2,2',4,4',5-Pentabromodiphenyl ether (#99)	
2,2',4,4',6-Pentabromodiphenyl ether (#100)	
2,2',3,4,4',5'-Hexabromodiphenyl ether (#138)	
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	

California Method 750-M Standard

BDE-CALEWS	1 x 1 mL
10 µg/mL each in Isooctane	13 comps.
2,2',4-Tribromodiphenyl ether (#17)	
2,4,4'-Tribromodiphenyl ether (#28)	
2,2',4,4'-Tetrabromodiphenyl ether (#47)	
2,3',4,4'-Tetrabromodiphenyl ether (#66)	
2,3',4,6-Tetrabromodiphenyl ether (#71)	
2,2',4,4',5-Pentabromodiphenyl ether (#99)	
2,2',4,4',6-Pentabromodiphenyl ether (#100)	
2,2',3,4,4',5'-Hexabromodiphenyl ether (#138)	
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	
2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183)	
2,2',3,3',4,4',5,5',6,6'-Decabromodiphenyl ether (#209)	
2,2',6,6'-Tetrabromobisphenol A	

Method 527 - PBDE Standard

M-527-BDE	1 x 1 mL
50 µg/mL each in Isooctane:Ethyl Acetate (80:20)	5 comps.
2,2',4,4'-Tetrabromodiphenyl ether	
2,2',4,4',6-Pentabromodiphenyl ether	
2,2',4,4',5-Pentabromodiphenyl ether	
2,2',4,4',5,5'-Hexabromodiphenyl ether	
2,2',4,4',5,5'-Hexabromobiphenyl	

Calibration Curve

ISO/DIS 22032 Calibration Curve Set

ISO/DIS-22032-SET

At stated conc. (ng/mL) in Isooctane

ISO/DIS-22032	01	02	03	04	05	06	07
2,2',4,4'-Tetrabromodiphenyl ether (#47)	5	12.5	25	50	100	150	250
2,2',4,4',5-Pentabromodiphenyl ether (#99)	5	12.5	25	50	100	150	250
2,2',4,4',6-Pentabromodiphenyl ether (#100)	5	12.5	25	50	100	150	250
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	5	12.5	25	50	100	150	250
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	5	12.5	25	50	100	150	250
2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183)	5	12.5	25	50	100	150	250
2,3,3',4,4',5,5',6-Octabromodiphenyl ether (#205)	5	12.5	25	50	100	150	250
2,2',3,3',4,4',5,5',6,6'-Decabromodiphenyl ether (#209)	25	50	100	200	500	700	1000

ISO/DIS 22032 Internal Standard for BDE-47, 99 & 100

ISO22032-IS-1-5ML	1 x 5 mL
ISO22032-IS-1-10ML	1 x 10 mL
100 ng/mL each in Isooctane	

3,3',4,4'-Tetrabromodiphenyl ether

ISO/DIS 22032 Internal Standard for BDE-153, 154 & 183

ISO22032-IS-2-5ML	1 x 5 mL
ISO22032-IS-2-10ML	1 x 10 mL
100 ng/mL each in Isooctane	

2,2',3,4,4',5,6-Heptabromodiphenyl ether



EPA Method 1614

Mixtures of PBDEs Standard Solution for Accuracy & Precision

BDE-AAP-A <i>At stated conc. in Isooctane</i>	1 x 1 mL 39 comps. ng/mL	BDE-AAP-A-15X <i>At stated conc. in Isooctane</i>	1 x 1 mL 39 comps. µg/mL
2-Bromodiphenyl ether (#1)	100	2-Bromodiphenyl ether (#1)	1.5
3-Bromodiphenyl ether (#2)	100	3-Bromodiphenyl ether (#2)	1.5
4-Bromodiphenyl ether (#3)	100	4-Bromodiphenyl ether (#3)	1.5
2,4-Dibromodiphenyl ether (#7)	100	2,4-Dibromodiphenyl ether (#7)	1.5
2,4'-Dibromodiphenyl ether (#8)	100	2,4'-Dibromodiphenyl ether (#8)	1.5
2,6-Dibromodiphenyl ether (#10)	100	2,6-Dibromodiphenyl ether (#10)	1.5
3,3'-Dibromodiphenyl ether (#11)	100	3,3'-Dibromodiphenyl ether (#11)	1.5
3,4-Dibromodiphenyl ether (#12)	100	3,4-Dibromodiphenyl ether (#12)	1.5
3,4'-Dibromodiphenyl ether (#13)	100	3,4'-Dibromodiphenyl ether (#13)	1.5
4,4'-Dibromodiphenyl ether (#15)	100	4,4'-Dibromodiphenyl ether (#15)	1.5
2,2',4,-Tribromodiphenyl ether (#17)	100	2,2',4-Tribromodiphenyl ether (#17)	1.5
2,3',4-Tribromodiphenyl ether (#25)	100	2,3',4-Tribromodiphenyl ether (#25)	1.5
2,4,4'-Tribromodiphenyl ether (#28)	100	2,4,4'-Tribromodiphenyl ether (#28)	1.5
2,4,6-Tribromodiphenyl ether (#30)	100	2,4,6-Tribromodiphenyl ether (#30)	1.5
2,4',6-Tribromodiphenyl ether (#32)	100	2,4',6-Tribromodiphenyl ether (#32)	1.5
2',3,4-Tribromodiphenyl ether (#33)	100	2',3,4-Tribromodiphenyl ether (#33)	1.5
3,3',4-Tribromodiphenyl ether (#35)	100	3,3',4-Tribromodiphenyl ether (#35)	1.5
3,4,4'-Tribromodiphenyl ether (#37)	100	3,4,4'-Tribromodiphenyl ether (#37)	1.5
2,2',4,4'-Tetrabromodiphenyl ether (#47)	100	2,2',4,4'-Tetrabromodiphenyl ether (#47)	1.5
2,2',4,5'-Tetrabromodiphenyl ether (#49)	100	2,2',4,5'-Tetrabromodiphenyl ether (#49)	1.5
2,3',4,4'-Tetrabromodiphenyl ether (#66)	100	2,3',4,4'-Tetrabromodiphenyl ether (#66)	1.5
2,3',4',6-Tetrabromodiphenyl ether (#71)	100	2,3',4',6-Tetrabromodiphenyl ether (#71)	1.5
2,4,4',6-Tetrabromodiphenyl ether (#75)	100	2,4,4',6-Tetrabromodiphenyl ether (#75)	1.5
3,3',4,4'-Tetrabromodiphenyl ether (#77)	100	3,3',4,4'-Tetrabromodiphenyl ether (#77)	1.5
2,2',3,4,4'-Pentabromodiphenyl ether (#85)	150	2,2',3,4,4'-Pentabromodiphenyl ether (#85)	2.25
2,2',4,4',5-Pentabromodiphenyl ether (#99)	150	2,2',4,4',5-Pentabromodiphenyl ether (#99)	2.25
2,2',4,4',6-Pentabromodiphenyl ether (#100)	150	2,2',4,4',6-Pentabromodiphenyl ether (#100)	2.25
2,3,4,5,6-Pentabromodiphenyl ether (#116)	150	2,3,4,5,6-Pentabromodiphenyl ether (#116)	2.25
2,3',4,4',5-Pentabromodiphenyl ether (#118)	150	2,3',4,4',5-Pentabromodiphenyl ether (#118)	2.25
2,3',4,4',6-Pentabromodiphenyl ether (#119)	150	2,3',4,4',6-Pentabromodiphenyl ether (#119)	2.25
3,3',4,4',5-Pentabromodiphenyl ether (#126)	150	3,3',4,4',5-Pentabromodiphenyl ether (#126)	2.25
2,2',3,4,4',5'-Hexabromodiphenyl ether (#138)	200	2,2',3,4,4',5'-Hexabromodiphenyl ether (#138)	3.0
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	200	2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	3.0
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	200	2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	3.0
2,2',4,4',6,6'-Hexabromodiphenyl ether (#155)	200	2,2',4,4',6,6'-Hexabromodiphenyl ether (#155)	3.0
2,3,4,4',5,6'-Hexabromodiphenyl ether (#166)	200	2,3,4,4',5,6'-Hexabromodiphenyl ether (#166)	3.0
2,2',3,4,4',5,6-Heptabromodiphenyl ether (#181)	250	2,2',3,4,4',5,6-Heptabromodiphenyl ether (#181)	3.75
2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183)	250	2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183)	3.75
2,3,3',4,4',5,6-Heptabromodiphenyl ether (#190)	250	2,3,3',4,4',5,6-Heptabromodiphenyl ether (#190)	3.75

Technical Note

Responding to the need for an analytical method for polybrominated diphenyl ether (PBDE) congeners, the EPA has developed Method 1614. Method 1614 is recommended for analysis of aqueous, solid, tissue, and multi-phase environmental samples.

Mixture of Commonly Occurring PBDE Congeners for Precision and Recovery

BDE-COC <i>At stated conc. in Isooctane</i>	1 x 1 mL 14 comps. µg/mL
2,2',4,-Tribromodiphenyl ether (#17)	5
2,4,4'-Tribromodiphenyl ether (#28)	5
2,2',4,4'-Tetrabromodiphenyl ether (#47)	5
2,3',4,4'-Tetrabromodiphenyl ether (#66)	5
2,3',4',6-Tetrabromodiphenyl ether (#71)	5
2,2',3,4,4'-Pentabromodiphenyl ether (#85)	5
2,2',4,4',5-Pentabromodiphenyl ether (#99)	5
2,2',4,4',6-Pentabromodiphenyl ether (#100)	5
2,2',3,4,4',5'-Hexabromodiphenyl ether (#138)	5
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	5
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	5
2,2',4,4',6,6'-Hexabromodiphenyl ether (#155)	5
2,2',3,4,4',5,6-Heptabromodiphenyl ether (#183)	5
2,3,3',4,4',5,6-Heptabromodiphenyl ether (#190)	5
Decabromodiphenyl ether (#209)	25

PBDE Congeners of Primary Interest

BDE-CSM <i>At stated conc. in Isooctane</i>	1 x 1 mL 8 comps. µg/mL
2,4,4'-Tribromodiphenyl ether (#28)	20
2,2',4,4'-Tetrabromodiphenyl ether (#47)	20
2,2',4,4',5-Pentabromodiphenyl ether (#99)	20
2,2',4,4',6-Pentabromodiphenyl ether (#100)	20
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	20
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	20
2,2',3,4,4',5,6-Heptabromodiphenyl ether (#183)	20
Decabromodiphenyl ether (#209)	200

PBDE Congeners of Primary Interest

Calibration Mix

BDE-CM <i>At stated conc. in Isooctane</i>	1 x 1 mL 8 comps. µg/mL
2,4,4'-Tribromodiphenyl ether (#28)	2.5
2,2',4,4'-Tetrabromodiphenyl ether (#47)	2.5
2,2',4,4',5-Pentabromodiphenyl ether (#99)	2.5
2,2',4,4',6-Pentabromodiphenyl ether (#100)	2.5
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	2.5
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	2.5
2,2',3,4,4',5,6-Heptabromodiphenyl ether (#183)	2.5
Decabromodiphenyl ether (#209)	25

Matrix Spiking Solution

BDE-MS <i>At stated conc. in Isooctane</i>	1 x 1 mL 8 comps. ng/mL
2,4,4'-Tribromodiphenyl ether (#28)	1
2,2',4,4'-Tetrabromodiphenyl ether (#47)	1
2,2',4,4',5-Pentabromodiphenyl ether (#99)	1
2,2',4,4',6-Pentabromodiphenyl ether (#100)	1
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	1
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	1
2,2',3,4,4',5,6-Heptabromodiphenyl ether (#183)	1
Decabromodiphenyl ether (#209)	10

PBDEs in Method 1614

BDE-EPA-SET <i>50 µg/mL each in Isooctane</i>	8 x 1 mL 8 comps.
2,4,4'-Tribromodiphenyl ether (#28)	
2,2',4,4'-Tetrabromodiphenyl ether (#47)	
2,2',4,4',5-Pentabromodiphenyl ether (#99)	
2,2',4,4',6-Pentabromodiphenyl ether (#100)	
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	
2,2',3,4,4',5,6-Heptabromodiphenyl ether (#183)	
Decabromodiphenyl ether (#209)	



Hydroxy and Methoxy Polybromodiphenyl Ether Congeners

Hydroxylated and methoxylated PBDEs may be formed as metabolites of the PBDE flame retardants. Hydroxylated PBDEs (OH-PBDEs) have been detected in human blood, mice, rats, fish and birds. They have been studied for their potential to disrupt the endocrine (hormone) system in mammals. One important aspect of these studies is the structural similarity of some of the OH-PBDEs with the **thyroid hormones** which affect every cell in the body. At Accustandard we have synthesized a variety of hydroxylated and methoxylated PBDEs. HBDE-3007 (**T2-like**), HBDE-4010 (**T3-like**), and HBDE-5010 (**T4-like**) display the closest similarity to the halogen substitution pattern of those thyroid hormones.

AccuStandard recognizes the significance of this on-going research and is supporting it by providing the necessary reference standards. Please check the website for the latest update of synthesized OH- and MeO-PBDEs, or request specific congeners to be synthesized.

Short Form	Compound	Conc.	Solvent	Cat. No.	1 mL
Hydroxy					
2'-OH-BDE-003	2'-Hydroxy-4-monobromodiphenyl ether	50 µg/mL	AcCN	HBDE-1001S-CN	
3'-OH-BDE-007	3'-Hydroxy-2,4-dibromodiphenyl ether	50 µg/mL	AcCN	HBDE-2001S-CN	
2'-OH-BDE-007	2'-Hydroxy-2,4-dibromodiphenyl ether	10 µg/mL	AcCN	HBDE-2002S-CN-0.2X	
2'-OH-BDE-009	2'-Hydroxy-2,5-dibromodiphenyl ether NEW	50 µg/mL	AcCN	HBDE-2003S-CN	
4'-OH-BDE-017	4'-Hydroxy-2,2',4-tribromodiphenyl ether	50 µg/mL	AcCN	HBDE-3001S-CN	
3'-OH-BDE-028	3'-Hydroxy-2,4,4'-tribromodiphenyl ether	50 µg/mL	AcCN	HBDE-3002S-CN	
2'-OH-BDE-028	2'-Hydroxy-2,4,4'-tribromodiphenyl ether	50 µg/mL	AcCN	HBDE-3003S-CN	
5'-OH-BDE-025	5'-Hydroxy-2,3',4-tribromodiphenyl ether	50 µg/mL	AcCN	HBDE-3004S-CN	
3'-OH-BDE-029	3'-Hydroxy-2,4,5-tribromodiphenyl ether NEW	50 µg/mL	AcCN	HBDE-3005S-CN	
3'-OH-BDE-030	3'-Hydroxy-2,4,6-tribromodiphenyl ether NEW	50 µg/mL	AcCN	HBDE-3006S-CN	
4'-OH-BDE-030	4'-Hydroxy-2,4,6-tribromodiphenyl ether NEW	50 µg/mL	AcCN	HBDE-3007S-CN	
4'-OH-BDE-042	4'-Hydroxy-2,2',3,4'-tetrabromodiphenyl ether	10 µg/mL	AcCN	HBDE-4001S-CN-0.2X	
4'-OH-BDE-049	4'-Hydroxy-2,2',4,5'-tetrabromodiphenyl ether	10 µg/mL	AcCN	HBDE-4002S-CN-0.2X	
3'-OH-BDE-047	3'-Hydroxy-2,2',4,4'-tetrabromodiphenyl ether	50 µg/mL	AcCN	HBDE-4003S-CN	
5'-OH-BDE-047	5'-Hydroxy-2,2',4,4'-tetrabromodiphenyl ether	50 µg/mL	AcCN	HBDE-4004S-CN	
6'-OH-BDE-047	6'-Hydroxy-2,2',4,4'-tetrabromodiphenyl ether	10 µg/mL	AcCN	HBDE-4005S-CN-0.2X	
2'-OH-BDE-068	2'-Hydroxy-2,3',4,5'-tetrabromodiphenyl ether	10 µg/mL	Toluene	HBDE-4005S-T-0.2X	
		10 µg/mL	AcCN	HBDE-4006S-CN-0.2X	
		10 µg/mL	Toluene	HBDE-4006S-T-0.2X	
		50 µg/mL	AcCN	HBDE-4006S-CN	
6'-OH-BDE-066	6'-Hydroxy-2,3',4,4'-tetrabromodiphenyl ether NEW	50 µg/mL	AcCN	HBDE-4008S-CN	
5'-OH-BDE-069	5'-Hydroxy-2,3',4,6-tetrabromodiphenyl ether NEW	50 µg/mL	AcCN	HBDE-4009S-CN	
4'-OH-BDE-069	4'-Hydroxy-2,3',4,6-tetrabromodiphenyl ether NEW	50 µg/mL	AcCN	HBDE-4010S-CN	
4'-OH-BDE-048	4'-Hydroxy-2,2',4,5-tetrabromodiphenyl ether NEW	50 µg/mL	AcCN	HBDE-4011S-CN	
4'-OH-BDE-090	4'-Hydroxy-2,2',3,4',5-pentabromodiphenyl ether	10 µg/mL	AcCN	HBDE-5001S-CN-0.2X	
6'-OH-BDE-085	6'-Hydroxy-2,2',3,4,4'-pentabromodiphenyl ether	10 µg/mL	AcCN	HBDE-5002S-CN-0.2X	
6'-OH-BDE-087	6'-Hydroxy-2,2',3,4,5'-pentabromodiphenyl ether	10 µg/mL	AcCN	HBDE-5003S-CN-0.2X	
5'-OH-BDE-100	5'-Hydroxy-2,2',4,4',6-pentabromodiphenyl ether NEW	10 µg/mL	AcCN	HBDE-5004S-CN-0.2X	
6'-OH-BDE-082	6'-Hydroxy-2,2',3,3',4-pentabromodiphenyl ether	10 µg/mL	AcCN	HBDE-5005S-CN-0.2X	
6'-OH-BDE-099	6'-Hydroxy-2,2',4,4',5-pentabromodiphenyl ether	10 µg/mL	AcCN	HBDE-5006S-CN-0.2X	
5'-OH-BDE-099	5'-Hydroxy-2,2',4,4',5-pentabromodiphenyl ether	10 µg/mL	AcCN	HBDE-5007S-CN-0.2X	
3'-OH-BDE-100	3'-Hydroxy-2,2',4,4',6-pentabromodiphenyl ether	50 µg/mL	AcCN	HBDE-5008S-CN	
4'-OH-BDE-101	4'-Hydroxy-2,2',4,5,5'-pentabromodiphenyl ether	50 µg/mL	AcCN	HBDE-5009S-CN	
4'-OH-BDE-121	4'-Hydroxy-2,3',4,5',6-pentabromodiphenyl ether NEW	50 µg/mL	AcCN	HBDE-5010S-CN	
6'-OH-BDE-123	6'-Hydroxy-2',3,4,4',5-pentabromodiphenyl ether NEW	50 µg/mL	AcCN	HBDE-5011S-CN	
6'-OH-BDE-157	6'-Hydroxy-2,3,3',4,4',5'-hexabromodiphenyl ether	10 µg/mL	AcCN	HBDE-6001S-CN-0.2X	
6'-OH-BDE-140	6'-Hydroxy-2,2',3,4,4',6'-hexabromodiphenyl ether	10 µg/mL	AcCN	HBDE-6002S-CN-0.2X	
3'-OH-BDE-154	3'-Hydroxy-2,2',4,4',5,6'-hexabromodiphenyl ether	10 µg/mL	AcCN	HBDE-6003S-CN-0.2X	
6'-OH-BDE-137	6'-Hydroxy-2,2',3,4,4',5'-hexabromodiphenyl ether	10 µg/mL	AcCN	HBDE-6004S-CN-0.2X	
3'-OH-BDE-155	3'-Hydroxy-2,2'-4,4',6,6'-hexabromodiphenyl ether NEW	10 µg/mL	AcCN	HBDE-6005S-CN-0.2X	
		50 µg/mL	AcCN	HBDE-6005S-CN	
4'-OH-BDE-146	4'-Hydroxy-2,2',3,4',5,5'-hexabromodiphenyl ether NEW	10 µg/mL	AcCN	HBDE-6006S-CN-0.2X	
		50 µg/mL	Isooctane	HBDE-6006S	
4'-OH-BDE-187	4'-Hydroxy-2,2',3,4',5,5',6'-heptabromodiphenyl ether	50 µg/mL	AcCN	HBDE-7001S-CN	
6'-OH-BDE-180	6'-Hydroxy-2,2',3,4,4',5,5'-heptabromodiphenyl ether	50 µg/mL	AcCN	HBDE-7002S-CN	
4'-OH-BDE-188	4'-Hydroxy-2,2',3,4',5,6,6'-heptabromodiphenyl ether	50 µg/mL	AcCN	HBDE-7003S-CN	
6'-OH-BDE-182	6'-Hydroxy-2,2',3,4,4',5,6'-heptabromodiphenyl ether	50 µg/mL	AcCN	HBDE-7004S-CN-0.2X	
4'-OH-BDE-201	4'-Hydroxy-2,2',3,3',4,5',6,6'-octabromodiphenyl ether	50 µg/mL	AcCN	HBDE-8001S-CN	

**Methoxy PBDE Congeners
on next page**



PBDE Metabolites

Methoxy Polybromodiphenyl Ether Congeners

Short Form	Compound	Conc.	Solvent	Cat. No.	1 mL
Methoxy					
2'-MeO-BDE-003	2'-Methoxy-4-monobromodiphenyl ether	50 µg/mL	MeOH	MOBDE-1001S	
3'-MeO-BDE-007	3'-Methoxy-2,4-dibromodiphenyl ether	50 µg/mL	MeOH	MOBDE-2001S	
2'-MeO-BDE-007	2'-Methoxy-2,4-dibromodiphenyl ether	10 µg/mL	MeOH	MOBDE-2002S-0.2X	
2'-MeO-BDE-009	2'-Methoxy-2,5-dibromodiphenyl ether NEW	50 µg/mL	MeOH	MOBDE-2003S	
4'-MeO-BDE-017	4'-Methoxy-2,2',4-tribromodiphenyl ether	50 µg/mL	MeOH	MOBDE-3001S	
3'-MeO-BDE-028	3'-Methoxy-2,4,4'-tribromodiphenyl ether	50 µg/mL	MeOH	MOBDE-3002S	
2'-MeO-BDE-028	2'-Methoxy-2,4,4'-tribromodiphenyl ether	50 µg/mL	MeOH	MOBDE-3003S	
5'-MeO-BDE-025	5'-Methoxy-2,3',4-tribromodiphenyl ether	50 µg/mL	MeOH	MOBDE-3004S	
3'-MeO-BDE-029	3'-Methoxy-2,4,5-tribromodiphenyl ether NEW	50 µg/mL	MeOH	MOBDE-3005S	
3'-MeO-BDE-030	3'-Methoxy-2,4,6-tribromodiphenyl ether NEW	50 µg/mL	MeOH	MOBDE-3006S	
4'-MeO-BDE-030	4'-Methoxy-2,4,6-tribromodiphenyl ether NEW	50 µg/mL	MeOH	MOBDE-3007S	
4-MeO-BDE-042	4-Methoxy-2,2',3,4'-tetrabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-4001S-0.2X	
4'-MeO-BDE-049	4'-Methoxy-2,2',3,4'-tetrabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-4002S-0.2X	
3-MeO-BDE-047	3-Methoxy-2,2',4,4'-tetrabromodiphenyl ether	50 µg/mL	MeOH	MOBDE-4003S	
5-MeO-BDE-047	5-Methoxy-2,2',4,4'-tetrabromodiphenyl ether	50 µg/mL	MeOH	MOBDE-4004S	
6-MeO-BDE-047	6-Methoxy-2,2',4,4'-tetrabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-4005S-0.2X	
2'-MeO-BDE-068	2'-Methoxy-2,3',4,5'-tetrabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-4006S-0.2X	
2'-MeO-BDE-075	2'-Methoxy-2,4,4',6-tetrabromodiphenyl ether	50 µg/mL	MeOH	MOBDE-4007S	
6'-MeO-BDE-066	6'-Methoxy-2,3',4,4'-tetrabromodiphenyl ether NEW	50 µg/mL	MeOH	MOBDE-4008S	
5'-MeO-BDE-069	5'-Methoxy-2,3',4,6-tetrabromodiphenyl ether NEW	10 µg/mL	MeOH	MOBDE-4009S-0.2X	
		50 µg/mL	MeOH	MOBDE-4009S	
4'-MeO-BDE-069	4'-Methoxy-2,3',4,6-tetrabromodiphenyl ether NEW	50 µg/mL	MeOH	MOBDE-4010S	
4'-MeO-BDE-048	4'-Methoxy-2,2',4,5-tetrabromodiphenyl ether NEW	50 µg/mL	MeOH	MOBDE-4011S	
4-MeO-BDE-090	4-Methoxy-2,2',3,4',5-pentabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-5001S-0.2X	
6-MeO-BDE-085	6-Methoxy-2,2',3,4,4'-pentabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-5002S-0.2X	
6-MeO-BDE-087	6-Methoxy-2,2',3,4,5'-pentabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-5003S-0.2X	
5'-MeO-BDE-100	5'-Methoxy-2,2',4,4',6-pentabromodiphenyl ether NEW	50 µg/mL	MeOH	MOBDE-5004S	
6-MeO-BDE-082	6-Methoxy-2,2',3,3',4-pentabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-5005S-0.2X	
6'-MeO-BDE-099	6'-Methoxy-2,2',4,4',5-pentabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-5006S-0.2X	
5'-MeO-BDE-099	5'-Methoxy-2,2',4,4',5-pentabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-5007S-0.2X	
3-MeO-BDE-100	3-Methoxy-2,2',4,4',6-pentabromodiphenyl ether	50 µg/mL	MeOH	MOBDE-5008S	
4'-MeO-BDE-101	4'-Methoxy-2,2',4,5,5'-pentabromodiphenyl ether	50 µg/mL	MeOH	MOBDE-5009S	
4'-MeO-BDE-121	4'-Methoxy-2,3',4,5',6-pentabromodiphenyl ether NEW	50 µg/mL	MeOH	MOBDE-5010S	
6-MeO-BDE-123	6-Methoxy-2',3,4,4',5-pentabromodiphenyl ether	50 µg/mL	MeOH	MOBDE-5011S	
6-MeO-BDE-157	6-Methoxy-2,3,3',4,4',5'-hexabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-6001S-0.2X	
6-MeO-BDE-140	6-Methoxy-2,2',3,4,4',6'-hexabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-6002S-0.2X	
3'-MeO-BDE-154	3'-Methoxy-2,2',4,4',5,6'-hexabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-6003S-0.2X	
6-MeO-BDE-137	6-Methoxy-2,2',3,4,4',5-hexabromodiphenyl ether NEW	10 µg/mL	MeOH	MOBDE-6004S-0.2X	
3-MeO-BDE-155	3-Methoxy-2,2',4,4',6,6'-hexabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-6005S-0.2X	
		50 µg/mL	MeOH	MOBDE-6005S	
4-MeO-BDE-146	4-Methoxy-2,2',3,4',5,5'-hexabromodiphenyl ether NEW	10 µg/mL	MeOH	MOBDE-6006S-0.2X	
4-MeO-BDE-187	4-Methoxy-2,2',3,4',5,5',6-heptabromodiphenyl ether	50 µg/mL	MeOH	MOBDE-7001S	
6-MeO-BDE-180	6-Methoxy-2,2',3,4,4',5,5'-heptabromodiphenyl ether	50 µg/mL	MeOH	MOBDE-7002S	
4-MeO-BDE-188	4-Methoxy-2,2',3,4',5,6,6'-heptabromodiphenyl ether	50 µg/mL	MeOH	MOBDE-7003S	
6-MeO-BDE-182	6-Methoxy-2,2',3,4,4',5,6'-heptabromodiphenyl ether	10 µg/mL	MeOH	MOBDE-7004S-0.2X	
4'-MeO-BDE-201	4'-Methoxy-2,2',3,3',4,5',6,6'-octabromodiphenyl ether	50 µg/mL	MeOH	MOBDE-8001S	

Mixed Bromo/Chloro Hydroxylated Diphenyl Ethers



The abundance of PBDEs in the environment led to the increased detection of hydroxylated PBDEs (OH-PBDEs) as well as their chlorinated derivatives (OH-PBCDEs) especially in aquatic environments. Several pathways of their formation have been described in the literature.

In saltwater systems, some of the OH-PBDEs are being produced naturally; while in freshwater systems, atmospheric and wastewater treatment oxidation seems to be the major source of these compounds. Furthermore, disinfection of wastewater with chlorine may lead to the chlorination of OH-PBDEs. These mixed bromo/chloro hydroxy diphenyl ethers (OH-PBCDEs) can then undergo photochemical cyclization in the presence of sunlight to form the potentially even more harmful brominated/chlorinated dibenzo-p-dioxins (Br/Cl-DDs). There is growing concern that both naturally and anthropogenically produced PBDDs and Br/Cl-DDs are an emerging environmental problem.

At AccuStandard, following the lead of environmental chemists, we recognize the emerging problem of the presence of OH-PBCDEs. We have synthesized three OH-PBCDEs and their methylated counterparts to provide reference standards for this new group of compounds. All three chlorinated OH-PBDEs are based on the structure of BDE-47, the most common BDE congener found in environmental samples.

AccuStandard will synthesize more derivatives as demand for these compounds develops.

Compound (Short Form)	Conc.	Solvent	Cat. No.	1 mL
Hydroxy				
3-Chloro-6-hydroxy-2,2',4,4'-tetrabromodiphenyl ether (3-Cl-6-OH-BDE-047)	25 µg/mL	Acetonitrile	HCBDE-4001S-0.5X	
	50 µg/mL	Acetonitrile	HCBDE-4001S	
3,5-Dichloro-6-hydroxy-2,2',4,4'-tetrabromodiphenyl ether (3,5-Cl ₂ -6-OH-BDE-047)	25 µg/mL	Acetonitrile	HCBDE-4002S-0.5X	
	50 µg/mL	Acetonitrile	HCBDE-4002S	
5-Chloro-6-hydroxy-2,2',4,4'-tetrabromodiphenyl ether (5-Cl-6-OH-BDE-047)	25 µg/mL	Acetonitrile	HCBDE-4003S-0.5X	
	50 µg/mL	Acetonitrile	HCBDE-4003S	
Methoxy				
3-Chloro-6-methoxy-2,2',4,4'-tetrabromodiphenyl ether (3-Cl-6-MeO-BDE-047)	25 µg/mL	Methanol	MOCBDE-4001S-0.5X	
	50 µg/mL	Methanol	MOCBDE-4001S	
3,5-Dichloro-6-methoxy-2,2',4,4'-tetrabromodiphenyl ether (3,5-Cl ₂ -6-MeO-BDE-047)	25 µg/mL	Methanol	MOCBDE-4002S-0.5X	
	50 µg/mL	Methanol	MOCBDE-4002S	
5-Chloro-6-methoxy-2,2',4,4'-tetrabromodiphenyl ether (5-Cl-6-MeO-BDE-047)	25 µg/mL	Methanol	MOCBDE-4003S-0.5X	
	50 µg/mL	Methanol	MOCBDE-4003S	



Fluorinated PBDE Congeners

Internal Standards for PBDE Analysis

As with PCBs, the separation and identification of PBDE congeners and related metabolites present a significant analytical challenge due to the co-elution of compounds and nearly identical mass spectra. The traditional approach of using ^{13}C labeled compounds has been successfully utilized for both internal standard quantification, and as an internal standard for calculating relative retention indices. However, this approach is expensive and cannot be used with electron capture detector methods. AccuStandard has synthesized a selection of mono and di-fluorinated analogs of the native BDEs that can be used as a replacement.

Short Form	Compound	Conc.	Solvent	Cat. No.	1 mL
F-BDE-003	4'-Fluoro-4-bromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-1001S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-1001S	
F-BDE-007	3'-Fluoro-2,4-dibromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-2001S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-2001S	
F-BDE-012	3'-Fluoro-3,4-dibromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-2002S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-2002S	
F-BDE-015	2-Fluoro-4,4'-dibromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-2003S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-2003S	
F-BDE-025	4'-Fluoro-2,3',4-tribromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-3001S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-3001S	
F-BDE-027	4'-Fluoro-2,3',6-tribromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-3002S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-3002S	
F-BDE-028	2'-Fluoro-2,4,4'-tribromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-3003S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-3003S	
F-BDE-028	3'-Fluoro-2,4,4'-tribromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-3004S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-3004S	
F-BDE-069	4'-Fluoro-2,3',4,6-tetrabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-4001S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-4001S	
F-BDE-067	4'-Fluoro-2,3',4,5-tetrabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-4002S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-4002S	
F-BDE-047	6-Fluoro-2,2',4,4'-tetrabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-4003S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-4003S	
F-BDE-066	6-Fluoro-2,3',4,4'-tetrabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-4004S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-4004S	
2F-BDE-047	5,5'-Difluoro-2,2',4,4'-tetrabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-4005S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-4005S	
F-BDE-070	3-Fluoro-2,3',4',5-tetrabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-4006S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-4006S	
F-BDE-077	5-Fluoro-3,3',4,4'-tetrabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-4007S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-4007S	
F-BDE-099	6'-Fluoro-2,2',4,4',5-pentabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-5001S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-5001S	
F-BDE-100	3-Fluoro-2,2',4,4',6-pentabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-5002S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-5002S	
2F-BDE-099	3,6-Difluoro-2,2',4,4',5-pentabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-5003S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-5003S	
2F-BDE-085	5,6-Difluoro-2,2',3,4,4'-pentabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-5004S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-5004S	
2F-BDE-119	3,5-Difluoro-2,3',4,4',6-pentabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-5005S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-5005S	
F-BDE-124	3'-Fluoro-2',3,4,5,5'-pentabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-5006S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-5006S	
F-BDE-118	5'-Fluoro-2,3',4,4',5-pentabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-5007S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-5007S	
F-BDE-126	5'-Fluoro-3,3',4,4',5-pentabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-5008S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-5008S	
F-BDE-160	4'-Fluoro-2,3,3',4,5,6-hexabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-6001S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-6001S	
F-BDE-139	5-Fluoro-2,2',3,4,4',6-hexabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-6002S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-6002S	
F-BDE-153	3-Fluoro-2,2',4,4',5,5'-hexabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-6003S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-6003S	
F-BDE-154	3'-Fluoro-2,2',4,4',5,6'-hexabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-6004S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-6004S	
F-BDE-183	5-Fluoro-2,2',3,4,4',5',6'-heptabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-7001S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-7001S	
2F-BDE-199	4',6-Difluoro-2,2',3,3',4,5,5',6'-octabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-8001S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-8001S	
F-BDE-208	4'-Fluoro-2,2',3,3',4,5,5',6,6'-nonabromodiphenyl ether	25 $\mu\text{g/mL}$	Isooctane	FBDE-9001S-0.5X	
		50 $\mu\text{g/mL}$	Isooctane	FBDE-9001S	



HBCD Isomers, Dechlorane Plus Isomers, Bromobiphenyls

Hexabromocyclododecane Isomers

Compound	CAS No.	Conc.	Matrix	Cat. No.	1 mL
α -Hexabromocyclododecane		100 $\mu\text{g/mL}$	Toluene	HXBCD-01	
β -Hexabromocyclododecane		100 $\mu\text{g/mL}$	Toluene	HXBCD-02	
γ -Hexabromocyclododecane		100 $\mu\text{g/mL}$	Toluene	HXBCD-03	
HBCD SP-75C (Great Lakes)	3194-55-6-GL	10 mg	NEAT	FRS-028N	
		100 $\mu\text{g/mL}$	Toluene	FRS-028S	

Dechlorane Plus Isomers

Compound	CAS No.	Conc.	Matrix	Cat. No.	1 mL
Dechlorane Plus "Anti"	135821-74-8	50 $\mu\text{g/mL}$	Toluene	FRS-061S-0.5X	
Dechlorane Plus "Syn"	135821-03-3	50 $\mu\text{g/mL}$	Toluene	FRS-062S-0.5X	
Dechlorane Plus (Mixed isomers)	13560-89-9	10 mg	NEAT	FRS-033N	
		100 $\mu\text{g/mL}$	Toluene	FRS-033S	

Bromobiphenyl Congeners

Compound	CAS No.	Conc.	Matrix	Neats as stated Cat. No.	1 mL
2-Bromobiphenyl	2052-07-5	50 mg	NEAT	B-001N	
		35 $\mu\text{g/mL}$	Isooctane	B-001S	
		1 mg/mL	Acetone	M-8081-SS-X	
3-Bromobiphenyl	2113-57-7	50 mg	NEAT	B-002N	
		35 $\mu\text{g/mL}$	Isooctane	B-002S	
4-Bromobiphenyl	92-66-0	50 mg	NEAT	B-003N	
		35 $\mu\text{g/mL}$	Isooctane	B-003S	
2,2'-Dibromobiphenyl	13029-09-9	10 mg	NEAT	B-004N	
		35 $\mu\text{g/mL}$	Isooctane	B-004S	
2,4-Dibromobiphenyl	53592-10-2	10 mg	NEAT	B-007N-10MG	
		35 $\mu\text{g/mL}$	Isooctane	B-007S	
2,5-Dibromobiphenyl	57422-77-2	25 mg	NEAT	B-009N	
		35 $\mu\text{g/mL}$	Isooctane	B-009S	
2,6-Dibromobiphenyl	59080-32-9	5 mg	NEAT	B-010N-5MG	
		35 $\mu\text{g/mL}$	Isooctane	B-010S	
4,4'-Dibromobiphenyl	92-86-4	10 mg	NEAT	B-015N	
		35 $\mu\text{g/mL}$	Isooctane	B-015S	
2,2',5-Tribromobiphenyl	59080-34-1	10 mg	NEAT	B-018N	
		35 $\mu\text{g/mL}$	Isooctane	B-018S	
2,3',5-Tribromobiphenyl	59080-35-2	10 mg	NEAT	B-026N	
		35 $\mu\text{g/mL}$	Isooctane	B-026S	
2,4,5-Tribromobiphenyl	115245-07-3	35 $\mu\text{g/mL}$	Isooctane	B-029S	
2,4,6-Tribromobiphenyl	59080-33-0	25 mg	NEAT	B-030N	
		35 $\mu\text{g/mL}$	Isooctane	B-030S	
2,4',5-Tribromobiphenyl	59080-35-3	10 mg	NEAT	B-031N	
		35 $\mu\text{g/mL}$	Isooctane	B-031S	
2,2',4,5'-Tetrabromobiphenyl	60044-24-8	5 mg	NEAT	B-049N-5MG	
		35 $\mu\text{g/mL}$	Isooctane	B-049S	
2,2',5,5'-Tetrabromobiphenyl	59080-37-4	10 mg	NEAT	B-052N	
		35 $\mu\text{g/mL}$	Isooctane	B-052S	
2,2',5,6'-Tetrabromobiphenyl	60044-25-9	5 mg	NEAT	B-053N-5MG	
		35 $\mu\text{g/mL}$	Isooctane	B-053S	
3,3',4,4'-Tetrabromobiphenyl	77102-82-0	35 $\mu\text{g/mL}$	Isooctane	B-077S	
3,3',5,5'-Tetrabromobiphenyl	16400-50-3	35 $\mu\text{g/mL}$	Isooctane	B-080S	
2,3,4,4',5-Pentabromobiphenyl	96551-70-1	35 $\mu\text{g/mL}$	Isooctane	B-114S	
2,2',4,5,5'-Pentabromobiphenyl	67888-96-4	5 mg	NEAT	B-101N	
		35 $\mu\text{g/mL}$	Isooctane	B-101S	
2,2',4,5',6-Pentabromobiphenyl	59080-39-6	5 mg	NEAT	B-103N	
		35 $\mu\text{g/mL}$	Isooctane	B-103S	
2,2',3,4,4',5-Hexabromobiphenyl	81381-52-4	35 $\mu\text{g/mL}$	Isooctane	B-137S	
2,2',3,4,5,5'-Hexabromobiphenyl	120991-47-1	35 $\mu\text{g/mL}$	Isooctane	B-141S	
2,2',4,4',5,5'-Hexabromobiphenyl	59080-40-9	5 mg	NEAT	B-153N-5MG	
		35 $\mu\text{g/mL}$	Isooctane	B-153S	
2,2',4,4',6,6'-Hexabromobiphenyl	59261-08-4	5 mg	NEAT	B-155N	
		35 $\mu\text{g/mL}$	Isooctane	B-155S	
2,3,3',4,4',5-Hexabromobiphenyl	77607-09-1	35 $\mu\text{g/mL}$	Isooctane	B-156S	
2,3,3',4,5,5'-Hexabromobiphenyl		35 $\mu\text{g/mL}$	Isooctane	B-159S	
3,3',4,4',5,5'-Hexabromobiphenyl	60044-26-0	35 $\mu\text{g/mL}$	Isooctane	B-169S	
2,2',3,4,4',5,5'-Heptabromobiphenyl	67733-52-2	35 $\mu\text{g/mL}$	Isooctane	B-180S	
2,3,3',4,4',5,5'-Heptabromobiphenyl		35 $\mu\text{g/mL}$	Isooctane	B-189S	
2,2',3,3',4,4',5,5'-Octabromobiphenyl		35 $\mu\text{g/mL}$	Isooctane	B-194S	
2,2',3,3',4,4',5,6'-Octabromobiphenyl	119264-60-7	35 $\mu\text{g/mL}$	Isooctane	B-200S	
Decabromobiphenyl	13654-09-6	25 mg	NEAT	B-209N	
		35 $\mu\text{g/mL}$	Isooctane : Acetone (98:2)	B-209S	



Bromophenols and their Methyl ethers

Bromophenols

Each at 100 µg/mL in Toluene

Compound	CAS No.	Cat. No.	1 mL
2-Bromophenol NEW	95-56-7	BP-002S	
3-Bromophenol	591-20-8	BP-003S	
4-Bromophenol	106-41-2	BP-004S	
2,3-Dibromophenol	57383-80-9	BP-023S	
2,4-Dibromophenol	615-58-7	BP-024S	
2,5-Dibromophenol	28165-52-8	BP-025S	
2,6-Dibromophenol	608-33-3	BP-026S	
3,4-Dibromophenol NEW	615-56-5	BP-034S	
3,5-Dibromophenol	626-41-5	BP-035S	
2,3,4-Tribromophenol	138507-65-0	BP-234S	
2,3,5-Tribromophenol NEW		BP-235S	
2,3,6-Tribromophenol NEW		BP-236S	
2,4,5-Tribromophenol	14401-61-7	BP-245S	
2,4,6-Tribromophenol	118-79-6	BP-246S	
3,4,5-Tribromophenol		BP-345S	
2,3,4,5-Tetrabromophenol		BP-2345S	
2,3,4,6-Tetrabromophenol	14400-94-3	BP-2346S	
2,3,5,6-Tetrabromophenol		BP-2356S	
Pentabromophenol	608-71-9	BP-23456S	

Bromoanisoles (Bromophenyl methyl ether)

Each at 50 µg/mL in Methanol

Compound	CAS No.	Cat. No.	1 mL
2-Bromoanisoole	578-57-4	BAN-01	
3-Bromoanisoole	2398-37-0	BAN-02	
4-Bromoanisoole	104-92-7	BAN-03	
2,3-Dibromoanisoole		BAN-04	
2,4-Dibromoanisoole	21702-84-1	BAN-05	
2,5-Dibromoanisoole	95970-08-4	BAN-06	
2,6-Dibromoanisoole	38603-09-7	BAN-07	
3,5-Dibromoanisoole	74137-36-3	BAN-08	
2,4,5-Tribromoanisoole		BAN-09	
2,4,6-Tribromoanisoole	607-99-8	BAN-10	





Industrial Flame Retardants

Bromine Containing (BFRs)

Bromine Containing Industrial Flame Retardants (BFRs) PURE

Compound	CAS No.	Conc.	Matrix	Cat. No.	1 mL
1,2-Dibromo-4-(1,2-dibromoethyl)cyclohexane (TBECH)	3322-93-8	10 mg	NEAT	FRS-038N	
		100 mg/mL	MeOH	FRS-038S	
Dibromoneopentyl glycol	3296-90-0	10 mg	NEAT	FRS-011N	
		100 µg/mL	Toluene	FRS-011S	
tris(2,3-Dibromopropyl) isocyanurate	52434-90-9	10 mg	NEAT	FRS-042N	
		100 µg/mL	Toluene	FRS-042S	
bis(2,3-Dibromopropyl)phthalate NEW	7415-86-3	10 mg	NEAT	FRS-067N	
		100 µg/mL	Toluene	FRS-067S	
tris(2,3-Dibromopropyl)phosphate NEW	126-72-7	10 mg	NEAT	FRS-057N	
		100 µg/mL	Toluene	FRS-057S	
(2,3-Dibromopropyl)(2,4,6-tribromophenyl) ether (DPTE)	35109-60-5	10 mg	NEAT	FRS-044N	
		100 µg/mL	Toluene	FRS-044S	
Di(2-ethylhexyl)tetrabromophthalate	26040-51-7	10 mg	NEAT	FRS-040N	
		100 µg/mL	Toluene	FRS-040S	
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate	183658-27-7	10 mg	NEAT	FRS-041N	
		100 µg/mL	Toluene	FRS-041S	
Hexachlorocyclopentadienyl-dibromocyclooctane	51936-55-1	10 mg	NEAT	FRS-039N	
		100 µg/mL	Toluene	FRS-039S	
Pentabromobenzene NEW	608-90-2	10 mg	NEAT	FRS-064N	
		50 µg/mL	Toluene	FRS-064S-0.5X	
Pentabromobenzylacrylate	59447-55-1	10 mg	NEAT	FRS-035N	
		100 µg/mL	Toluene	FRS-035S	
Pentabromobenzylbromide	38521-51-6	10 mg	NEAT	FRS-030N	
		100 µg/mL	Toluene	FRS-030S	
Pentabromoethylbenzene	85-22-3	100 µg/mL	Toluene	FRS-048S	
1,4-bis(Pentabromophenoxy)tetrabromobenzene	58965-66-5	10 mg	NEAT	FRS-052N	
		100 µg/mL	Toluene	FRS-052S	
Tetrabromobisphenol A	79-94-7	10 mg	NEAT	FRS-074N	
		100 µg/mL	Toluene	FRS-074S	
Tetrabromobisphenol A bis(2,3-dibromopropyl ether) NEW	21850-44-2	10 mg	NEAT	FRS-034N	
		100 µg/mL	Toluene	FRS-034S	
Tetrabromobisphenol A bis(hydroxyethyl ether)	4162-45-2	50 mg	NEAT	FRS-032N	
		100 µg/mL	Toluene	FRS-032S	
Tetrabromobisphenol A bismethyl ether NEW	37853-61-5	10 mg	NEAT	FRS-069N	
		100 µg/mL	Toluene	FRS-069S	
Tetrabromobisphenol A diallyl ether	25327-89-3	10 mg	NEAT	FRS-045N	
		100 µg/mL	Toluene	FRS-045S	
Tetrabromobisphenol S NEW	39635-79-5	10 mg	NEAT	FRS-070N	
		100 µg/mL	Toluene	FRS-070S	
Tetrabromobisphenol S bis(2,3-dibromopropyl ether) NEW	42757-55-1	10 mg	NEAT	FRS-075N	
		100 µg/mL	Toluene	FRS-075S	
1,2,5,6-Tetrabromocyclooctane NEW	3194-57-8	10 mg	NEAT	FRS-068N	
		100 µg/mL	Toluene	FRS-068S	
Tetrabromophthalic acid NEW	13810-83-8	10 mg	NEAT	FRS-065N	
		100 µg/mL	Toluene	FRS-065S	
Tribromoneopentyl alcohol	1522-92-5 / 36483-57-5	10 mg	NEAT	FRS-046N	
		100 µg/mL	Toluene	FRS-046S	
tris(Tribromoneopentyl) phosphate	19186-97-1	10 mg	NEAT	FRS-047N	
		100 µg/mL	Toluene	FRS-047S	
1,2-bis(2,4,6-Tribromophenoxy)ethane	37853-59-1	10 mg	NEAT	FRS-037N	
		100 µg/mL	Toluene	FRS-037S	
2,4,6-tris(2,4,6-Tribromophenoxy)-1,3,5-triazine	25713-60-4	100 µg/mL	Toluene	FRS-049S	
2,4,6-Tribromophenyl allyl ether	3278-89-5	10 mg	NEAT	FRS-043N	
		100 µg/mL	Toluene	FRS-043S	

Compounds are available in different solvents.
Please contact our Technical Service Department.

Industrial Flame Retardants

Bromine Containing (BFRs)



Bromine Containing Industrial Flame Retardants (BFRs) Commercial Grade

Compound	CAS No.	Active Ingredient	Conc.	Matrix	Cat. No.	1 mL
Bromkal™ DE-70-5		Penta BDEs	50 µg/mL	Isooctane	BDE-705	
Bromkal™ DE-71		Penta BDEs	50 µg/mL	Isooctane	BDE-710	
Bromkal™ DE-73-6		Hexa BDEs	50 µg/mL	Isooctane	BDE-736	
Bromkal™ DE-79-8		Octa BDEs	50 µg/mL	Isooctane	BDE-798	
Dow FR-250	27858-07-7	Mix of Octa and Nonabromobiphenyl	35 µg/mL	Isooctane	B-250S-0.35X	
			100 µg/mL	Isooctane	B-250S	
Firemaster™ BP4A	79-94-7	Tetrabromobisphenol A	100 µg/mL	Toluene	FRS-006S	
Firemaster™ BP-6	59536-65-1	Hexabromobiphenyl	35 µg/mL	Isooctane	B-600S-0.35X	
			100 µg/mL	Isooctane	B-600S	
Firemaster™ PHT4	632-79-1	Tetrabromophthalic anhydride	10 mg	NEAT	FRS-007N	
			100 µg/mL	Toluene	FRS-007S	
Firemaster™ T23P (Michigan Chemical)	126-72-7	Tris(2,3-dibromopropyl)phosphate	10 mg	NEAT	FRS-008N	
			100 µg/mL	Toluene	FRS-008S	
Firemaster™ 680 (Great Lakes)	37853-59-1	1,2-Bis(2,4,6-tribromophenoxy)ethane	50 mg	NEAT	FRS-037N	
			100 µg/mL	Toluene	FRS-037S	
Firemaster™ 2100 (Great Lakes)	84852-53-9	Decabromodiphenylethane	50 mg	NEAT	FRS-036N	
			100 µg/mL	Toluene	FRS-036S	
FR-300BA	1163-19-5	Decabromodiphenyl ether 85.5%	10 mg	NEAT	FRS-009N	
			100 µg/mL	Toluene	FRS-009S	
FR-651A (Dow)	87-84-3	Pentabromochlorocyclohexane	10 mg	NEAT	FRS-010N	
			100 µg/mL	Toluene	FRS-010S	
FR-1138 (Dow)	3296-90-0	Dibromoneopentyl glycol 85.0%	10 mg	NEAT	FRS-011N	
			100 µg/mL	Toluene	FRS-011S	
HBCD SP-75C (Great Lakes)	3194-55-6-GL	1,2,5,6,9,10-Hexabromocyclododecane	10 mg	NEAT	FRS-028N	
			100 µg/mL	Toluene	FRS-028S	
Hexabromobenzene (Michigan Chemical)	87-82-1	Hexabromobenzene	10 mg	NEAT	FRS-012N	
			100 µg/mL	Toluene	FRS-012S	
Hexabromobenzene (White Chemical)	87-82-1	Hexabromobenzene	10 mg	NEAT	FRS-013N	
			100 µg/mL	Toluene	FRS-013S	
Hexabromobenzene (Hummel)	87-82-1	Hexabromobenzene	10 mg	NEAT	FRS-014N	
			100 µg/mL	Toluene	FRS-014S	
Pentabromotoluene (White Chemical)	87-83-2	Pentabromotoluene	10 mg	NEAT	FRS-018N	
			100 µg/mL	Toluene	FRS-018S	
Saytex BT-93	32588-76-4	Ethylene bis(tetrabromophthalimide)	50 µg/mL	Toluene	FRS-053S-0.5X	
Saytex RB-79	77058-07-8	2-(2'-Hydroxyethoxy) ethyl, 2-hydroxypropyl-tetrabromophthalate	10 mg	NEAT	FRS-054N	
			100 µg/mL	Toluene	FRS-054S	
Tetrabromo-o-chlorotoluene (White Chemical)		Tetrabromo-o-chlorotoluene (98%)	10 mg	NEAT	FRS-021N	
			100 µg/mL	Toluene	FRS-021S	
TP-69 (Great Lakes)	126-72-7	Tris(2,3-dibromopropyl)phosphate	10 mg	NEAT	FRS-023N	
			100 µg/mL	Toluene	FRS-023S	

Registered Trademarks

Chlorafin Hercules Powder Company Corp.
Chlorowax Dover Chemical Corp.

Firemaster Great Lakes Chemical Corp.
Paroil Dover Chemical Corp.

Phosgard Solutia Inc.
Unichlor Neville Chemical Co.

Other BFR Related Chemicals

Compound	CAS No.	Conc.	Matrix	Cat. No.	1 mL
2-Bromoallyl-2,4,6-tribromophenyl ether NEW	99717-56-3	10 mg	NEAT	FRS-063N	
		100 µg/mL	Toluene	FRS-063S	
3-Bromostyrene	2039-86-3	10 mg	NEAT	FRS-050N	
		100 µg/mL	Toluene	FRS-050S	
4-Bromostyrene	2039-82-9	10 mg	NEAT	FRS-051N	
		100 µg/mL	Toluene	FRS-051S	
2,3,4,5-Tetrabromobenzoic acid (Metabolite) NEW	27581-13-1	100 µg/mL	Toluene: THF (85:15)	FRS-066S	
Tetrabromobisphenol A bisglycidyl ether NEW	3072-84-2	10 mg	NEAT	FRS-073N	
		100 µg/mL	Toluene	FRS-073S	
Tetrabromobisphenol S bisglycidyl ether NEW		10 mg	NEAT	FRS-072N	
		100 µg/mL	Toluene	FRS-072S	
Tetrabromobisphenol S bismethyl ether NEW	70156-79-5	10 mg	NEAT	FRS-071N	
		100 µg/mL	Toluene	FRS-071S	
2,4,6-Tribromophenol (Metabolite)	118-79-6	100 µg/mL	Toluene	BP-246S	



Industrial Flame Retardants

Phosphate Flame Retardants (PFRs) and Chlorine Containing Flame Retardants (CFRs)

Organophosphate Flame Retardants (PFRs)

Organophosphate compounds (OPs) are high production volume chemicals that have a high potential of acute toxicity to insects, wildlife and humans. They are utilized as flame retardants and plasticizers, antifoaming agents and additives not only in plastics, but in paints, lubricants and hydraulic fluids as well. The chlorinated organophosphate compounds like tris(2-chloroethyl) phosphate and tris(1,3-dichloro-2-propyl) phosphate are flame retardants used in both flexible and rigid polyurethane foam (e.g. furniture foam, thermal insulation), rubber, textile coatings, and home electronics. Organophosphates have been detected in indoor air and house dust, surface, ground, and even drinking water. Toxicology studies have shown these compounds to inhibit acetylcholinesterase which is essential to nerve functions in insects and humans.



Compound	CAS No.	Conc.	Matrix	Cat. No.	1 mL
Trimethyl phosphate (TMP)	512-56-1	100 µg/mL	Toluene	PFRS-016S	
Dimethyl phosphate	813-78-5	100 µg/mL	Toluene	PFRS-006S	
Triethyl phosphate (TEP)	78-40-0	100 µg/mL	Toluene	PFRS-012S	
Diethyl phosphate (mono & di-)	598-02-7	100 µg/mL	Toluene	PFRS-005S	
Tripropyl phosphate (TPRP)	513-08-6	100 µg/mL	Toluene	PFRS-021S	
Triisopropyl phosphate (TiPP, TiPrP)	513-02-0	100 µg/mL	Toluene	PFRS-013S	
Tributyl phosphate	126-73-8	100 µg/mL	Toluene	PFRS-009S	
Triphenyl phosphate (TPeP)	2528-38-3	100 µg/mL	Hexane	PFRS-019S-H	
tris(2-ethylhexyl) phosphate	78-42-2	100 µg/mL	Toluene	PFRS-028S	
Triphenyl phosphate (TPP, TPhP)	115-86-8	100 µg/mL	Toluene	PFRS-020S	
2-Ethylhexyl diphenyl phosphate (EDP, DPEHP)	1241-94-7	100 µg/mL	Toluene	PFRS-007S	
Tri(2-isopropylphenyl) phosphate	64532-95-2	100 µg/mL	Toluene	PFRS-014S	
Isodecyl diphenyl phosphate	29761-21-5	100 µg/mL	Toluene	PFRS-008S	
Cresyl diphenyl phosphate (CDP)	26444-49-5	100 µg/mL	Toluene	PFRS-004S	
Tri-o-cresyl phosphate (o-TCP, TOCP, TOTP)	78-30-8	100 µg/mL	Toluene	PFRS-017S	
Tri-p-cresyl phosphate (p-TCP, TPCP, TPTP)	78-32-0	100 µg/mL	Toluene	PFRS-018S	
Tricresyl phosphate (mixture of isomers) (TCP, TCrP, TToP)	1330-78-5	100 µg/mL	Toluene	PFRS-011S	
Tri-m-cresyl phosphate (m-TCP, TMTP)	563-04-2	100 µg/mL	Toluene	PFRS-015S	
tris(2-butoxyethyl) phosphate (TBEP)	78-51-3	100 µg/mL	Toluene	PFRS-022S	
tris(2-chloroethyl) phosphate (TCEP)	115-96-8	100 µg/mL	Toluene	PFRS-024S	
tris(1-chloro-2-propyl) phosphate (TCPP, TCiPP)	13674-84-5	100 µg/mL	Toluene	PFRS-025S	
tris(2-chloropropyl)phosphate	6145-73-9	100 µg/mL	Toluene	PFRS-023S	
Tri(3-chloropropyl) phosphate (TCPP)	26248-87-3	100 µg/mL	Toluene	PFRS-010S	
tris(1,3-dichloro-2-propyl) phosphate (TDCPP, TDCP)	13674-87-8	100 µg/mL	Toluene	PFRS-027S	
tris(2,3-dibromopropyl) phosphate	126-72-7	100 µg/mL	Toluene	PFRS-026S	
bis(2,3-dibromopropyl) phosphate	5412-25-9	100 µg/mL	Toluene	PFRS-002S	
tris(tribromoneopentyl) phosphate (TTBNP)	19186-97-1	100 µg/mL	Toluene	PFRS-029S	
Tetrakis(2-chloroethyl)dichloroisopentylidiphosphate (V6)	38051-10-4	100 µg/mL	Toluene	PFRS-003S	
Resorcinol bis(diphenyl phosphate) (RDP)	57583-54-7	100 µg/mL	Toluene	PFRS-030S	
Bisphenol A bis(diphenyl phosphate) (BADP, BAPP, BPADP, BDP)	5945-33-5	100 µg/mL	Toluene	PFRS-001S	

Chlorine Containing Industrial Flame Retardants (CFRs)

Compound	CAS No.	Active Ingredient	Conc.	Matrix	Cat. No.	1 mL
Chlorafin™ 40	63449-39-8	Chlorinated Paraffin	10 mg	NEAT	FRS-002N	
			100 µg/mL	Toluene	FRS-002S	
Chlorendic anhydride	115-27-5	Chlorendic anhydride	10 mg	NEAT	FRS-001N	
			100 µg/mL	Toluene	FRS-001S	
bis(2-Chloroethyl)ether	111-44-4	bis(2-Chloroethyl)ether	100 µg/mL	MeOH	APP-9-027	
			5 mg/mL	MeOH	AS-E0016	
4-Chlorophenyl phenyl ether	7005-72-3	4-Chlorophenyl phenyl ether	100 µg/mL	MeOH	APP-9-047	
			5 mg/mL	MeOH	AS-E0038	
Chlorowax™ 500C	63449-39-8	Chlorinated Hydrocarbons 59.0%	10 mg	NEAT	FRS-004N	
			100 µg/mL	Toluene	FRS-004S	
Chlorowax™ 70	63449-39-8	Chlorinated Hydrocarbons 70.0%	10 mg	NEAT	FRS-003N	
			100 µg/mL	Toluene	FRS-003S	
Diablo 700X	63449-39-8	Chlorinated Hydrocarbons 70.0%	10 mg	NEAT	FRS-005N	
			100 µg/mL	Toluene	FRS-005S	
Dechlorane Plus (Mixed isomers)	13560-89-9	Dechlorane Plus	10 mg	NEAT	FRS-033N	
			100 µg/mL	Toluene	FRS-033S	
Hexachlorobutadiene	87-68-3	Hexachlorobutadiene	100 µg/mL	Toluene	FRS-017S	
Paroil™ 179-HV	63449-39-8	Chlorinated Paraffin	10 mg	NEAT	FRS-015N	
			100 µg/mL	Toluene	FRS-015S	
Paroil™ 170-8	63449-39-8	Chlorinated Paraffin	100 µg/mL	Toluene	FRS-016S	
Phosgard™ C 22-R	4351-70-6	Halogenated organic phosphate ester	10 mg	NEAT	FRS-019N	
			100 µg/mL	Toluene	FRS-019S	
Phosgard™ 2XC-20, V6	38051-10-4	Halogenated organic phosphate ester	100 µg/mL	Toluene	FRS-020S	
Tetrachlorobisphenol A	79-95-8	Tetrachlorobisphenol A	10 mg	NEAT	FRS-022N	
			100 µg/mL	Toluene	FRS-022S	
Unichlor™ 40-90	63449-39-8	Chlorinated Hydrocarbons 38.5%	10 mg	NEAT	FRS-024N	
			100 µg/mL	Toluene	FRS-024S	
Unichlor™ 502-50	63449-39-8	Chlorinated Hydrocarbons 52.0%	10 mg	NEAT	FRS-025N	
			100 µg/mL	Toluene	FRS-025S	
Unichlor™ 70AX	63449-39-8	Chlorinated Hydrocarbons 70.0%	10 mg	NEAT	FRS-026N	
			100 µg/mL	Toluene	FRS-026S	

Polynuclear Aromatic Hydrocarbons



Polycyclic Aromatic Hydrocarbons (PAHs) are hydrocarbon compounds with multiple benzene rings. PAHs are typical components of asphalts, fuels, oils, and greases. They are also called Polycyclic Aromatic Hydrocarbons and have been linked to cancer and hormone disruption.

Purity 98+%,
except where
indicated

PAHs in Bulk
Quantities Available

Polynuclear Aromatic Hydrocarbons (PAHs)

Compound	Synonym	CAS No.	NEAT Cat. No.	Unit	50 µg/mL in Toluene SOLUTION Cat. No.	1 mL
Acenaphthene		83-32-9	H-108N	100 mg	H-108S	
Acenaphthylene		208-96-8	H-125N	100 mg	H-125S	
Acridine		260-94-6	H-187N	100 mg	H-187S	
Anthanthrene		191-26-4	H-109N	10 mg	H-109S	
Anthracene		120-12-7	H-110N	100 mg	H-110S	
Azulene		275-51-4	H-127N	10 mg	H-127S	
1,2-Benzanthracene	<i>Tetraphene</i>	56-55-3	H-100N	10 mg	H-100S	
2,3-Benzanthracene		92-24-0	H-159N	10 mg	H-159S	
Benz[a]anthracene-7,12-dione	<i>Benzanthraquinone</i>	2498-66-0	H-111N	10 mg	H-111S	
Benzo[b]chrysene		214-17-5	H-183N	5 mg	H-183S	
Benzo[b]fluoranthene	<i>Benzo[e]acephenanthrylene</i>	205-99-2	H-128N	10 mg	H-128S	
Benzo[j]fluoranthene		205-82-3	H-171N	10 mg	H-171S	
Benzo[k]fluoranthene		207-08-9	H-129N	10 mg	H-129S	
1,2-Benzofluorene		238-84-6	-----	-----	H-130S	
2,3-Benzofluorene		243-17-4	H-180N	10 mg	H-180S	
Benzo[g,h,i]perylene	<i>1,12-Benzoperylene</i>	191-24-2	H-103N	10 mg	H-103S	
Benzo[c]phenanthrene		195-19-7	H-244N	10 mg	H-244S	
Benzo[a]pyrene (ACS grade)	<i>3,4-Benzopyrene</i>	50-32-8	H-169N-ACS	10 mg	-----	---
Benzo[a]pyrene (Ames grade)			H-169N	10 mg	H-169S	
Benzo[e]pyrene		192-97-2	H-112N	10 mg	H-112S	
2,3-Benzofuran		271-89-6	H-237N	10 mg	H-237S	
5,6-Benzoquinoline	<i>Benzo[f]quinoline</i>	85-02-9	H-113N-10MG	10 mg	H-113S	
7,8-Benzoquinoline		230-27-3	H-245N	100 mg	H-245S	
2,2'-Binaphthyl		612-78-2	H-239N	50 mg	H-239S	
Biphenyl		92-52-4	H-133N	500 mg	H-133S	
Carbazole		86-74-8	H-114N	100 mg	H-114S	
Chrysene	<i>Benzo[a]phenanthrene</i>	218-01-9	H-115N	100 mg	H-115S	
Coronene		191-07-1	H-116N	5 mg	H-116S	
Cyclopenta[c,d]pyrene		27208-37-3	-----	-----	H-242S	
Dibenz[a,h]acridine		226-36-8	H-172N	10 mg	H-172S	
Dibenz[a,j]acridine		224-42-0	H-173N	10 mg	H-173S	
1,2:3,4-Dibenzanthracene	<i>Dibenz[a,c]anthracene</i>	215-58-7	H-134N	10 mg	H-134S	
1,2:5,6-Dibenzanthracene	<i>Dibenz[a,h]anthracene</i>	53-70-3	H-135N	10 mg	H-135S	
7H-Dibenzo[c,g]carbazole		194-59-2	-----	-----	H-176S	
Dibenzo-p-dioxin		262-12-4	D-100N	10 mg	D-100S *	
Dibenzo[a,e]fluoranthene		5385-75-1	-----	-----	H-247S	
Dibenzofuran		132-64-9	F-100N	50 mg	-----	--
1,2,4,5-Dibenzopyrene	<i>Dibenzo[a,e]pyrene</i>	192-65-4	-----	-----	H-138S	
Dibenzo[a,h]pyrene		189-64-0	H-177N	10 mg	H-177S	
Dibenzo[a,i]pyrene		189-55-9	H-178N	5 mg	H-178S	
Dibenzo[a,l]pyrene		191-30-0	-----	-----	H-179S	
Diphenylenesulfide	<i>Dibenzothiophene</i>	132-65-0	H-117N	100 mg	H-117S	
1,2:8,9-Dibenzpentacene		227-09-8	H-139N **	5 mg	H-139S	
9,10-Dihydroanthracene		613-31-0	H-140N	100 mg	H-140S	
12,12A-Dihydro-3,9-dimethylbenz[a]anthracene			-----	-----	H-188S	
Diindeno[1,2,3-cd-1',2',3'-lm]perylene	<i>Periflanthene</i>	188-94-3	-----	-----	H-141S	
2,3-Dimethylanthracene		613-06-9	H-189N	10 mg	H-189S	
9,10-Dimethylanthracene		781-43-1	H-190N	10 mg	H-190S	
3,9-Dimethylbenz[a]anthracene		316-51-8	-----	-----	H-191S	
6,8-Dimethylbenz[a]anthracene		317-64-6	-----	-----	H-192S	
7,12-Dimethylbenz[a]anthracene		57-97-6	H-174N	10 mg	H-174S	
1,12-Dimethylbenzo[c]phenanthrene		4076-43-1	-----	-----	H-193S	
5,8-Dimethylbenzo[c]phenanthrene		54886-63-9	-----	-----	H-194S	
7,10-Dimethylbenzo[a]pyrene		63104-33-6	-----	-----	H-195S	
1,2-Dimethylnaphthalene		573-98-8	H-197N	10 mg	H-197S	
1,3-Dimethylnaphthalene (96%)		575-41-7	H-198N	10 mg	H-198S	
1,4-Dimethylnaphthalene (95%)		571-53-4	H-199N	10 mg	H-199S	
1,5-Dimethylnaphthalene		571-61-9	H-200N	10 mg	H-200S	
1,6-Dimethylnaphthalene		575-43-9	H-201N	10 mg	H-201S	
1,8-Dimethylnaphthalene (95%)		569-41-5	H-202N	10 mg	H-202S	
2,6-Dimethylnaphthalene		581-42-0	H-161N	10 mg	H-161S	
2,7-Dimethylnaphthalene		582-16-1	H-203N	10 mg	H-203S	

* in Isooctane

** Call for price.



PAHs



Polynuclear Aromatic Hydrocarbons

PAHS

Polynuclear Aromatic Hydrocarbons (PAHs)

Purity 98+%,
except where
indicated

Compound	Synonym	CAS No.	NEAT Cat. No.	Unit	50 µg/mL in Toluene SOLUTION Cat. No.	1 mL
3,6-Dimethylphenanthrene		1576-67-6	H-142N-5MG	5 mg	H-142S	
9,10-Diphenylanthracene		1499-10-1	H-185N	100 mg	H-185S	
Dodecahydrotriphenylene		1610-39-5	H-144N	100 mg	H-144S	
6-Ethylchrysene		2732-58-3	H-264N	10 mg		
Fluoranthene		206-44-0	H-118N	100 mg	H-118S	
Fluorene		86-73-7	H-146N	100 mg	H-146S	
Indan		496-11-7	H-231N	100 mg	H-231S	
Indene		95-13-6	H-230N	100 mg	H-230S	
Indeno[1,2,3-cd]pyrene	<i>o-Phenylene pyrene</i>	193-39-5	H-157N	10 mg	H-157S	
Indole		120-72-9	H-236N	100 mg	H-236S	
Isoquinoline		119-65-3	H-232N	100 mg	H-232S	
1-Methylanthracene		610-48-0	H-222N	10 mg	H-222S	
2-Methylanthracene		613-12-7	H-148N	10 mg	H-148S	
9-Methylanthracene		779-02-2	H-149N	10 mg	H-149S	
1-Methylbenz[a]anthracene		2498-77-3	-----	-----	H-213S	
2-Methylbenz[a]anthracene		2498-76-2	-----	-----	H-214S	
3-Methylbenz[a]anthracene		2498-75-1	-----	-----	H-215S	
4-Methylbenz[a]anthracene		316-49-4	-----	-----	H-216S	
5-Methylbenz[a]anthracene		2319-96-2	-----	-----	H-217S	
6-Methylbenz[a]anthracene		316-14-3	-----	-----	H-218S	
7-Methylbenz[a]anthracene		2541-69-7	-----	-----	H-219S	
9-Methylbenz[a]anthracene		2381-16-0	-----	-----	H-220S	
10-Methylbenz[a]anthracene		2381-15-9	-----	-----	H-221S	
1-Methylbenzo[c]phenanthrene		4076-39-5	-----	-----	H-208S	
2-Methylbenzo[c]phenanthrene		2606-85-1	-----	-----	H-209S	
3-Methylbenzo[c]phenanthrene		2381-19-3	-----	-----	H-210S	
4-Methylbenzo[c]phenanthrene		4076-40-8	-----	-----	H-211S	
5-Methylbenzo[c]phenanthrene		652-04-0	-----	-----	H-212S	
7-Methylbenzo[a]pyrene		63041-77-0	H-223N	10 mg	H-223S	
8-Methylbenzo[a]pyrene		63041-76-9	-----	-----	H-205S	
9-Methylbenzo[a]pyrene		70644-19-8	-----	-----	H-206S	
10-Methylbenzo[a]pyrene		63104-32-5	-----	-----	H-207S	
3-Methylcholanthrene	<i>20-Methylcholanthrene</i>	56-49-5	H-170N	10 mg	H-170S	
4-Methylchrysene		3351-30-2	-----	-----	H-228S	
5-Methylchrysene		3697-24-3	-----	-----	H-243S	
6-Methylchrysene		1705-85-7	H-175N	10 mg	H-175S	
2-Methylfluoranthene		33543-31-6	H-182N-5MG	5 mg	H-182S	
1-Methylnaphthalene		90-12-0	H-001N	100 mg	H-001S	
2-Methylnaphthalene		91-57-6	H-002N	100 mg	H-002S	
9-Methyl-9-phenylfluorene		56849-83-3	H-204N	10 mg	H-204S	
1-Methylphenanthrene		832-69-9	-----	-----	H-162S	
2-Methylphenanthrene		2531-84-2	-----	-----	H-003S	
3-Methylphenanthro[3,4-c]phenanthrene		83844-21-7	-----	-----	H-224S	
1-Methylpyrene		2381-71-7	-----	-----	H-233S	
4,5-Methylenephenanthrene		203-64-5	-----	-----	H-119S	
Naphthalene		91-20-3	H-152N	100 mg	H-152S	
Perylene		198-55-0	H-121N	10 mg	H-121S	
Phenanthrene		85-01-8	H-122N	100 mg	H-122S	
9-Phenylanthracene		602-55-1	H-156N	100 mg	H-156S	
<i>o-Phenylene pyrene</i>	see Indeno[1,2,3-cd]pyrene					
1-Phenylnaphthalene		605-02-7	H-246N	100 mg	H-246S	
2-Phenylnaphthalene		612-94-2	H-158N	5 mg	H-158S	
Picene		213-46-7	-----	-----	H-184S	
Pyrene		129-00-0	H-123N	100 mg	H-123S	
Pyrrrole		109-97-7	H-229N	100 mg	H-229S	
Quinoline		91-22-5	H-186N	100 mg	H-186S	
2,3:6,7-Tetraethylbiphenylene			H-225N	10 mg	H-225S	
1,2:3,4-Tetrahydrofluoranthene		42429-92-5	H-165N	10 mg	H-165S	
<i>Tetraphene</i>	see 1,2-Benzanthracene					
Thianaphthene		95-15-8	H-238N	100 mg	H-238S	
Thianthrene		92-85-3	H-241N	100 mg	-----	--
4,6,8-Trimethylazulene		941-81-1	H-226N	10 mg	H-226S	
8,9,11-Trimethylbenz[a]anthracene		74845-58-2	-----	-----	H-227S	
Triphenylene		217-59-4	H-235N	10 mg	H-235S	
Truxene (95%)		548-35-6	H-124N	100 mg	H-124S	



PAH Sets and Solutions

AccuStandard has assembled these Polycyclic Aromatic Hydrocarbon Kits for use as reference standards for the predominant species found in ambient air samples. This library of standards was compiled as a working list used by the EPA, based on their research and literature surveys. One kit is offered as individual neat compounds, and the other as individual solutions. The Solution Kit also contains all the compounds in one solution.

PAH Neat Sets

Z-001-SET

Kit of 20 x 5 mg

Acenaphthene (01)	Chrysene (11)
Anthanthrene (02)	Coronene (12)
Anthracene (03)	Dibenzothiophene (13)
1,2-Benzanthracene (04)	Fluoranthene (14)
Benz[a]anthracene-7,12-dione (95%) (05)	4,5-Methylenepheneanthrene (15)
Benzo[g,h,i]perylene (06)	Naphthalene (16)
Benzo[a]pyrene (07)	Perylene (17)
Benzo[e]pyrene (08)	Phenanthrene (18)
5,6-Benzoquinoline (09)	Pyrene (19)
Carbazole (10)	Truxene (95%) (20)

Z-013N-SET

16 x 10 mg

(set includes, 16 individual neat analytes)

Acenaphthene	Chrysene
Acenaphthylene	Dibenz[a,h]anthracene
Anthracene	Fluoranthene
Benzo[a]anthracene	Fluorene
Benzo[a]pyrene	Indeno[1,2,3-cd]pyrene
Benzo[b]fluoranthene	Naphthalene
Benzo[g,h,i]perylene	Phenanthrene
Benzo[k]fluoranthene	Pyrene

PAH Solutions

All Solutions at 0.2 mg/mL in 1 mL

Compound	Solvent	Cat. No.
Acenaphthene	MeOH	Z-013-01
Acenaphthylene	MeOH	Z-013-02
Anthracene	MeOH	Z-013-03
Benz[a]anthracene	CH ₂ Cl ₂	Z-013-04
Benzo[a]pyrene	CH ₂ Cl ₂	Z-013-05
Benzo[b]fluoranthene	MeOH	Z-013-06
Benzo[g,h,i]perylene	CH ₂ Cl ₂	Z-013-07
Benzo[k]fluoranthene	CH ₂ Cl ₂	Z-013-08
Chrysene	CH ₂ Cl ₂	Z-013-09
Dibenz[a,h]anthracene	CH ₂ Cl ₂	Z-013-10
Fluoranthene	CH ₂ Cl ₂	Z-013-11
Fluorene	MeOH	Z-013-12
Indeno[1,2,3-cd]pyrene	MeOH	Z-013-13
Naphthalene	MeOH	Z-013-14
Phenanthrene (98%)	CH ₂ Cl ₂	Z-013-15
Pyrene	CH ₂ Cl ₂	Z-013-16

Mixture of the above 16 analytes,
at 0.2 mg/mL in MeOH:CH₂Cl₂ (50:50) 16 comps.

Set of the above 16 individual solutions, plus
a mixture Z-013-17 (set of 17 x 1 mL)

Z-013-SET

PAH Standard (Quebec Ministry of Environmental PAH Mix)

H-QME-01

500 µg/mL each in CH₂Cl₂:Benzene (50:50)

1 x 1 mL

24 comps.

Acenaphthene	Benzo[c]phenanthrene	7,12-Dimethylbenz[a]anthracene
Acenaphthylene	Benzo[a]pyrene	Fluoranthene
Anthracene	Benzo[e]pyrene	Fluorene
Benzo[a]anthracene	Chrysene	Indeno[1,2,3-cd]pyrene
Benzo[b]fluoranthene	Dibenz[a,h]anthracene	3-Methylcholanthrene
Benzo[j]fluoranthene	Dibenzo[a,h]pyrene	Naphthalene
Benzo[k]fluoranthene	Dibenzo[a,i]pyrene	Phenanthrene
Benzo[g,h,i]perylene	Dibenzo[a,j]pyrene	Pyrene





Nitro-Polynuclear Aromatic Hydrocarbons

The atmosphere of most of the industrialized areas of the world contains Polynuclear Aromatic Hydrocarbons (PAHs) and Nitrogen Oxides (NOx)¹. Wherever these compounds exist together, they react and form Nitro-PAHs, which are highly mutagenic.

Scientists have found Nitro-PAHs in diesel particulates², carbon black^{3,4} and ambient air particulates⁵. These compounds are the major contributors to the mutagenicity of the pollutants, since the most common Nitro-PAH found is 1-Nitropyrene, a potent mutagen.

AccuStandard has compiled an extensive inventory of Nitro substituted compounds including mono, di and tri Nitro-PAHs, Amino and Hydroxy substituted PAHs, Nitrotoluenes, Nitroanilines and Nitrophenols. Most compounds are offered in both neat form and in solution.

References:

- (1) Nitroated PAHs. Edited by C.M. White, Published by Huethig 1985.
- (2) Analysis of Nitroated Polycyclic Aromatic Hydrocarbons in Diesel Particulates, D. Schuetzle et al., Anal. Chem., Vol. 54, pp. 265-71 (1982).
- (3) Mutagenic Activity in Photocopies, G. Lofroth et al., Science, Vol. 209, pp. 1037-9 (1980).
- (4) Nitrophenols: Isolation, Identification and Reduction of Mutagenic Impurities in Carbon Black and Toners, H.S. Rosenkranz et al., Science, Vol. 290, pp. 1039-43 (1980).
- (5) Atmospheric Reactions of Polycyclic Aromatic Hydrocarbons: Facile Formation of Mutagenic Nitro Derivatives, J.N. Pitts, Jr. et al., Science, Vol. 202, pp. 515-8 (1978).

Nitro-PAHs

Compound	CAS No.	NEAT		100 µg/mL in Toluene SOLUTION	
		Cat. No.	Unit	Cat. No.	1 mL
1-Amino-4-nitronaphthalene	776-34-1	R-001N	100 mg	R-001S	
2-Nitroanthracene	3586-69-4	R-105N	5 mg	R-105S	
9-Nitroanthracene	602-60-8	R-003N	5 mg	R-003S	
7-Nitrobenz[a]anthracene	20268-51-3	R-097N	5 mg	R-097S	
6-Nitrobenz[a]pyrene	63041-90-7	-----	-----	R-004S	
2-Nitrobiphenyl	86-00-0	R-005N	100 mg	R-005S	
3-Nitrobiphenyl	2113-58-8	R-006N	100 mg	R-006S	
4-Nitrobiphenyl	92-93-3	R-007N	100 mg	R-007S	
6-Nitrochrysene	7496-02-8	R-008N	5 mg	R-008S	
3-Nitrodibenzofuran	5410-97-9	R-009N	5 mg	R-009S	
2-Nitrodibenzothiophene	6639-36-7	R-010N	5 mg	R-010S	
3-Nitrofluoranthene	892-21-7	R-013N	5 mg	R-013S	
2-Nitrofluorene	607-57-8	R-098N	100 mg	R-098S	
5-Nitroacenaphthene	602-87-9	R-115N	5 mg	R-115S	
1-Nitronaphthalene	86-57-7	R-016N	100 mg	R-016S	
2-Nitronaphthalene	581-89-5	R-085N-10MG	10 mg	R-085S	
3-Nitrophenanthrene	17024-19-0	R-045N	5 mg	R-045S	
9-Nitrophenanthrene	954-46-1	R-020N	5 mg	R-020S	
1-Nitropyrene	5522-43-0	R-022N	5 mg	R-022S	

Di- and Tri- Nitro-PAHs

Compound	CAS No.	NEAT		100 µg/mL in Toluene SOLUTION	
		Cat. No.	Unit	Cat. No.	1 mL
9,10-Dinitroanthracene	33685-60-8	R-024N	5 mg	R-024S	
2,2'-Dinitrobiphenyl	2436-96-6	R-025N	100 mg	R-025S	
2,8-Dinitrodibenzothiophene	109041-38-5	R-026N	5 mg	R-026S	
2,7-Dinitrofluorene	5405-53-8	R-027N	100 mg	R-027S	
2,7-Dinitro-9-fluorenone	31551-45-8	R-028N	100 mg	R-028S	
1,3-Dinitronaphthalene	606-37-1	R-029N	100 mg	R-029S	
1,5-Dinitronaphthalene	605-71-0	R-030N	100 mg	R-030S	
1,8-Dinitronaphthalene	602-38-0	R-031N	100 mg	R-031S	
1,3-Dinitropyrene	75321-20-9	R-094N	5 mg	R-094S	
1,6-Dinitropyrene	42397-64-8	R-032N	5 mg	R-032S	
1,8-Dinitropyrene	42397-65-9	R-099N	5 mg	R-099S	
2,4,7-Trinitro-9-fluorenone	129-79-3	-----	-----	R-033S	

Nitro-Aromatics

Compound	CAS No.	NEAT		100 µg/mL in Toluene SOLUTION	
		Cat. No.	Unit	Cat. No.	1 mL
Nitrobenzene	98-95-3	R-047N	100 mg	R-047S	
2-Nitrotoluene	88-72-2	R-048N	100 mg	R-048S	
2,4-Dinitrotoluene	121-14-2	R-049N	100 mg	R-049S	
2,6-Dinitrotoluene	606-20-2	R-050N	100 mg	R-050S	
2-Nitrophenol	51-28-5	R-051N	100 mg	R-051S	
4-Nitrophenol	100-02-7	R-052N	100 mg	R-052S	
2,4-Dinitrophenol	51-28-5	-----	-----	R-053S	
2-Nitroaniline	88-74-4	R-054N	100 mg	R-054S	
3-Nitroaniline	99-09-2	R-055N	100 mg	R-055S	
4-Nitroaniline	100-01-6	R-056N	100 mg	R-056S	
4,6-Dinitro-o-cresol (2-Methyl-4,6-dinitrophenol)	534-52-1	R-057N	100 mg	R-057S	

PAHs Derivatives continued on next page

Polynuclear Aromatic Hydrocarbons Derivatives



Amino-PAHs

Compound	CAS No.	NEAT Cat. No.	Unit	100 µg/mL in Toluene SOLUTION	
				Cat. No.	1 mL
2-Acetamidofluorene	53-96-3	R-058N	10 mg	R-058S	
1-Aminoanthracene	610-49-1	R-059N	50 mg	R-059S	
2-Aminoanthracene	613-13-8	R-060N	50 mg	R-060S	
1-Aminoanthraquinone	82-45-1	R-061N	50 mg	R-061S	
2-Aminoanthraquinone	117-79-3	R-093N	5 mg	R-093S	
2-Aminobiphenyl	90-41-5	R-062N	10 mg	R-062S	
4-Aminobiphenyl	92-67-1	R-063N	10 mg	R-063S	
6-Aminochrysene	2642-98-0	R-065N	10 mg	R-065S	
2-Aminofluorene	153-78-6	R-066N	10 mg	R-066S	
1-Aminonaphthalene	134-32-7	R-067N	50 mg	R-067S	
2-Aminonaphthalene	91-59-8	R-084N	10 mg	R-084S	
2,7-Diaminofluorene	525-64-4	R-068N	10 mg	R-068S	
1,8-Diaminonaphthalene	479-27-6	R-069N	100 mg	R-069S	
1,2-Diphenylhydrazine	122-66-7	R-070N	100 mg	R-070S	
N-phenyl-1-naphthylamine	90-30-2	R-071N	50 mg	R-071S	
o-Tolidine (3,3'-Dimethylbenzidine)	119-93-7	R-072N	100 mg	R-072S	

Hydroxy-PAHs

Compound	CAS No.	NEAT Cat. No.	Unit	100 µg/mL in Toluene SOLUTION	
				Cat. No.	1 mL
6-Hydroxychrysene	37515-51-8	R-095N	10 mg	R-095S	
1-Hydroxypyrene	5315-79-7	R-096N	10 mg	R-096S	

Amino-Aromatics

Compound	CAS No.	Neat Cat. No.	Unit	100 µg/mL in Toluene Solution	
				Cat. No.	1 mL
Benzidine	92-87-5	R-073N	100 mg	R-073S	
3,3'-Diaminobenzidine	91-95-2	R-074N	50 mg	R-074S	
3,3'-Dichlorobenzidine	91-94-1	R-075N	50 mg	R-075S	
3,3'-Dimethoxybenzidine	119-90-4	R-076N	50 mg	R-076S	
4,4'-Diaminodiphenylmethane (4,4'-Methylenedianiline)	101-77-9	R-077N	100 mg	R-077S	
2,4-Diaminotoluene	95-80-7	R-078N	100 mg	R-078S	
4-Dimethylaminoazobenzene	60-11-7	R-079N	10 mg	R-079S	
4,4'-Methylene bis(2-chloroaniline)	101-14-4	R-080N	50 mg	R-080S	
N-Methyl-N'-nitro-N-nitrosoguanidine	70-25-7	R-081N	50 mg	R-081S	
N-Phenyl-2-naphthylamine	135-88-6	R-082N	10 mg	R-082S	
s-Triazine	290-87-9	R-083N	10 mg	R-083S	

DIN-38407-17 Nitroaromatic Compounds

Examination of water, wastewater, and sludge for the determination of selected nitroaromatic compounds by Gas-Liquid Chromatography

DIN38407-17 1 x 1 mL
500 µg/mL each in MeOH 12 comps.

Nitrobenzene	3,4-Dinitrotoluene
2-Nitrotoluene	2-Amino-6-nitrotoluene
4-Nitrotoluene	4-Amino-2-nitrotoluene
1,3-Dinitrobenzene	4-Amino-2,6-dinitrotoluene
2,6-Dinitrotoluene	2-Amino-4,6-dinitrotoluene
2,4-Dinitrotoluene	2,4,6-Trinitrotoluene



Nitrogen Containing Compounds

Nitrogen Containing Compounds

Compound	CAS No.	Conc.	Matrix	Cat. No.	Unit
Azobenzene	103-33-3	2 mg/mL	CH ₂ Cl ₂	Z-014B-1	1 mL
2-Chloronitrobenzene	88-73-3	100 mg	NEAT	R-017N	100 mg
		100 µg/mL	Toluene	R-017S	1 mL
4-Chloronitrobenzene	100-00-5	100 mg	NEAT	R-018N	100 mg
		100 µg/mL	Toluene	R-018S	1 mL
2,3-Dichloronitrobenzene	3209-22-1	100 mg	NEAT	R-086N	100 mg
		100 µg/mL	Toluene	R-086S	1 mL
2,4-Dichloronitrobenzene	611-06-3	100 mg	NEAT	R-087N	100 mg
		100 µg/mL	Toluene	R-087S	1 mL
2,5-Dichloronitrobenzene	89-61-2	100 mg	NEAT	R-088N	100 mg
		100 µg/mL	Toluene	R-088S	1 mL
2,2'-Dinitrobiphenyl	2436-96-6	100 mg	NEAT	R-025N	100 mg
		100 µg/mL	Toluene	R-025S	1 mL
2,4-Dinitrophenol	51-28-5	100 µg/mL	Toluene	R-053S	1 mL
2,4-Dinitrotoluene	121-14-2	100 mg	NEAT	R-049N	100 mg
		100 µg/mL	Toluene	R-049S	1 mL
		100 µg/mL	MeOH	APP-9-092	1 mL
		5 mg/mL	MeOH	AS-E0033	1 mL
2,6-Dinitrotoluene	606-20-2	100 mg	NEAT	R-050N	100 mg
		100 µg/mL	Toluene	R-050S	1 mL
		100 µg/mL	MeOH	APP-9-093	1 mL
		5 mg/mL	MeOH	AS-E0034	1 mL
N-Methyl-N'-nitro-N-nitrosoguanidine	70-25-7	50 mg	NEAT	R-081N	50 mg
		100 µg/mL	Toluene	R-081S	1 mL
2-Nitrobiphenyl	86-00-0	100 mg	NEAT	R-005N	100 mg
		100 µg/mL	Toluene	R-005S	1 mL
3-Nitrobiphenyl	2113-58-8	100 mg	NEAT	R-006N	100 mg
		100 µg/mL	Toluene	R-006S	1 mL
4-Nitrobiphenyl	92-93-3	100 mg	NEAT	R-007N	100 mg
		100 µg/mL	Toluene	R-007S	1 mL
2-Nitrophenol	88-75-5	100 mg	NEAT	R-051N	100 mg
		100 µg/mL	Toluene	R-051S	1 mL
4-Nitrophenol	100-02-7	100 mg	NEAT	R-052N	100 mg
		100 µg/mL	Toluene	R-052S	1 mL
2-Nitrotoluene	88-72-2	100 mg	NEAT	R-048N	100 mg
		100 µg/mL	Toluene	R-048S	1 mL
Pyridine	110-86-1	100 µg/mL	MeOH	APP-9-186-M	1 mL
		2 mg/mL	MeOH	APP-9-186-M-20X	1 mL
		5 mg/mL	MeOH	AS-E0271	1 mL
		10 mg/mL	Water	M-8015B/5031-26	1 mL
2,3,4,5-Tetrachloronitrobenzene	879-39-0	100 mg	NEAT	R-091N	100 mg
		100 µg/mL	Toluene	R-091S	1 mL
2,3,5,6-Tetrachloronitrobenzene	117-18-0	100 mg	NEAT	R-092N	100 mg
		100 µg/mL	Toluene	R-092S	1 mL
s-Triazine	290-87-9	10 mg	NEAT	R-083N	10 mg
		100 µg/mL	Toluene	R-083S	1 mL
2,3,4-Trichloronitrobenzene	17700-09-3	100 mg	NEAT	R-089N	100 mg
		100 µg/mL	Toluene	R-089S	1 mL
2,4,5-Trichloronitrobenzene	89-69-0	100 mg	NEAT	R-090N	100 mg
		100 µg/mL	Toluene	R-090S	1 mL



Over 1000 Individual Pesticide Standards

Over 125 New Pesticides

Table of Contents

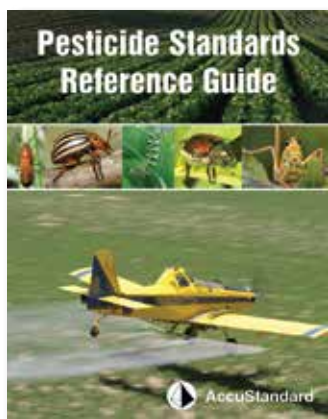
Individual Neats and Solutions	47-63
Pesticide, Herbicide Kits & Mixtures	64
Triazines and Metabolites	65
Phenylurea Pesticide Mixtures	65
Honeybee Colony Collapse Disorder (CCD) Neonicotinoids, Fipronil, and its metabolites	66

Pesticides, their by-products, metabolites and degradates

Pesticides are usually viewed as something bad for the environment and human health. The risk/benefit balance needs to be understood, this is what research on the presence and toxicity of these products demonstrates.

In addition to many of the pesticides for which production has been discontinued (but are still present in the environment), AccuStandard has synthesized metabolites, degradates, and by-products such as:

- Aldicarb sulfone and sulfoxide
- Oxychlorane and o,p'-Methoxychlor
- DDT by-products
- Endrin aldehyde and ketone
- Fipronyl sulfone, sulfoxide and desulfinyl



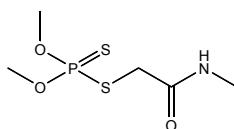
Pesticide Standards Reference Guide

Lists over 1000 pesticides and contains technical information such as: chemical name, structure, CAS number, molecular formula, molecular weight, physical state and for most: solubility, specific gravity, melting or boiling point, flash point and common synonyms.

Sample:

Dimethoate

2-Dimethoxyphosphinothioylthio-N-methylacetamide



CAS 60-51-5 MF C₅H₁₂NO₃PS₂ MW 229.26 PS S
SG 1.31 g/cm³ MP 50 °C BP 117 °C FP 107 °C

Matrix	Cat. No.	Unit
Neat	P-039N	10 mg
100 µg/mL in MeOH	P-039S	1 mL

Property Key		Solubility Key (SOL)	
CAS	Chemical Abstract Service Number	A	Acetone
MF	Molecular Formula	CN	Acetonitrile (AcCN)
MW	Molecular Weight	D	Methylene chloride
PS	Physical State (Solid, Liquid)	DMSO	Dimethyl sulfoxide
SOL	Solubility	EA	Ethyl acetate
SG	Specific Gravity (g/cm ³)	H	Hexane
MP	Melting Point (°C)	IPA	Isopropanol
BP	Boiling Point (°C)	MeOH	Methanol
FP	Flash Point (°C)	MC	Methyl cellosolve
		T	Toluene
		TP	Isooctane
		W	Water

Includes formulations for over 50 EPA and international pesticide methods.

Request or download your Pesticide Standards Reference Guide at AccuStandard.com

Same Low Price in Neat (10 mg) or Solution (100 µg/mL) form

Most Pesticides are available in 1000 µg/mL (add -10X).
Call or visit website for pricing.

Call or Visit our website with Custom Requests

Custom pesticide formulations can be prepared for residue screening and other applications.



Analytical Capabilities

Information on Pesticides Catalog Numbers

Pesticide Catalog Numbers have 5 parts:

1. The initial **P-** specifies the product is a Pesticide.
2. The following three numbers are sequentially assigned, and are unique to the chemical.
3. The next character (**an N or S**) specifies whether the product is Neat or in Solution.
4. “-” with letters specify a solvent other than Methanol (MeOH).
5. “-” with a number followed by an X specifies the concentration difference from the 100 µg/mL (ex: -10X is 1000 µg/mL). Check for availability.

Example: P-017S is Chlordane at 100 µg/mL in Methanol
P-017N is Chlordane neat (10 mg)
P-017S-H-10X is Chlordane at 1000 µg/mL in Hexane

Key to symbols appearing in the table:

in Acetone (-A)	in Hexane (-H)	in Toluene (-T)
in Acetonitrile (-CN)	in Isooctane (-TP)	In Water (-W)
in Ethyl acetate (-EA)	in Methyl cellosolve (-MC)	

Can't find a Pesticide? Search using CAS No. Index in back of the catalog.

Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.



EXACT WEIGHT for Neat Pesticides

Listed Catalog neat products are overfilled approximately 10%, however, pesticides can be provided with **EXACT WEIGHT**. Specify EXACT WEIGHT by ordering **X-WT** and the exact weight is noted on the product label. There is an additional charge for this service. Rinse the pesticide out of the vial with the appropriate amount of solvent to get a weight/volume standard and calculate the concentration.

Purchasing Neat Standards

There are two ways to purchase neat standards: Nominal weight and exact weight. With exact weight, the standards will come with the exact weight contained in the vial indicated on the label. The Cat. No. will have an X-WT to indicate that this is an exact weight. Rinse the sample out of the vial and cap with solvent and dilute to achieve the desired concentration. Unless specified, neat samples are provided with nominal weights. Typically, the vials contain up to 10 to 20% more product, however it is not known when you receive your standard what the exact amount is in the vial. Below is a standard procedure for removing all the neat material from the vial and determining the exact weight of the material in the vial.

Small amounts (5-10 mg) of powder often are spread over the surface of the vial and cap. If the chemical is a liquid it may coat the walls as a thin layer invisible to the eye. To recover all of the contents contained in a vial of neat material please use the procedure described below:

1. Wipe the outside of the vial (containing the Standard) clean and dry (including the cap).
2. Weigh the entire unit on an analytical balance. Record the weight to the nearest 0.1 mg.
3. Carefully transfer the contents to a volumetric flask using a suitable solvent. Rinse the cap and vial several times to assure a complete transfer.
4. Dry inside and outside of the vial and cap with mild heat or inert gas.
5. Weigh the empty dry vial on the same analytical balance to the nearest 0.1 mg and calculate by difference the amount of material transferred.





Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
AArex	see Atrazine			Amicarbazone NEW	129909-90-6	AcCN	P-1152S-CN
Abamectin	71751-41-2	NEAT	P-615N	Amidosulfuron	120923-37-7	NEAT	P-821N
		MeOH	P-615S			AcCN	P-821S-CN
Abaphos	see Abate			Amigol	see Amitrole		
Abar	see Leptophos			Aminocarb	2032-59-9	NEAT	P-062N
Abate	3383-96-8	NEAT	P-101N			MeOH	P-062S
		MeOH	P-101S	Aminomethylphosphonic acid	1066-51-9	NEAT	P-625N
Abathion	see Abate					H2O	P-625S-W
Acalarate	see Chloropropylate			Aminopyralid NEW	150114-71-9	NEAT	P-1048N
Acarben	see Chlorobenzilate					MeOH	P-1048S
Acclaim	see Fenoxaprop-p-ethyl			4-Aminopyridine	504-24-5	NEAT	P-407N
		MeOH	P-407S			MeOH	P-407S
Acephate	30560-19-1	NEAT	P-200N	Aminotriazole	see Amitrole		
		Acetone	P-200S-A	Aminozone	see Alar		
Acequinocyl NEW	3383-96-8	NEAT	P-1037N	Amiral	see Triadimefon		
		MeOH	P-1037S	Amisulbrom NEW	348635-87-0	MeOH	P-998S
Acetamiprid	135410-20-7	NEAT	P-820N	Amitraz	33089-61-1	NEAT	P-409N
		AcCN	P-820S-CN			AcCN	P-409S-CN
Acetochlor	34256-82-1	NEAT	P-465N	Amitrole (ATA)	61-82-5	NEAT	P-103N
		MeOH	P-465S			MeOH	P-103S
Acibenzolar-S-methyl	135158-54-2	NEAT	P-895N	Amizine	see Simazine		
		MeOH	P-895S	Amizol	see Amitrole		
Acifluorfen	50594-66-6	NEAT	P-245N	Ammonium sulfamate	7773-06-0	NEAT	P-530N
		MeOH	P-245S			MeOH	P-530S
		AcCN	P-245S-CN	AMS	see Ammonium sulfamate		
Acifluorfen methyl ester	50594-67-7	NEAT	P-246N	Ancymidol	12771-68-5	NEAT	P-410N
		MeOH	P-246S			MeOH	P-410S
Acionifen NEW	74070-46-5	AcCN	P-890S-CN	Anilazine	101-05-3	NEAT	P-287N
Acrinathrin	101007-06-1	AcCN	P-842S-CN			Hexane	P-287S-H
Actellic	see Pirimphos methyl ester					AcCN	P-973S-CN
Acti-Aid	see Cycloheximide			Anilofos NEW	64249-01-0		
Actosin C	see Chlorophacinone			Antiphen	see Dichlorophen		
Admire	see Imidacloprid			Apl-Luster	see Thiabendazole		
Afalon	see Linuron			Aprocarb	see Baygon		
Affirm	see Abamectin			Aracide	see Aramite		
Afugan	see Pyrazophos			Aracnol F	see Cyhexatin		
Agritox	see Trichloronate			Aramite	140-57-8	MeOH	P-132S
Agroxone	see MCPA acid			A-Rest	see Ancymidol		
Aimsan	see Phenthoate			Arisan	see Buturon		
Akar	see Chlorobenzilate			Arresin	see Monolinuron		
Alachlor	15972-60-8	NEAT	P-102N	Aspon	3244-90-4	MeOH	P-309S
		MeOH	P-102S	Assure	see Quizalofop ethyl		
Alanap	132-66-1	NEAT	P-274N	Asulam	3337-71-1	NEAT	P-276N
		MeOH	P-274S			MeOH	P-276S
Alar	1596-84-5	NEAT	P-174N	ATA	see Amitrole		
		MeOH	P-174S	Athrombine-K	see Warfarin		
Albendazole	54965-21-8	NEAT	P-498N	Atritol	see Atrazine		
		MeOH	P-498S	Atraton	see Gesatamin		
Aldicarb	116-06-3	NEAT	P-001N	Atrazine	1912-24-9	NEAT	P-005N
		MeOH	P-001S			MeOH	P-005S
Aldicarb sulfone	1646-88-4	NEAT	P-130N			Acetone	P-005S-A-10X
		MeOH	P-130S	Atrazine desethyl	6190-65-4	NEAT	P-343N
Aldicarb sulfoxide	1646-87-3	NEAT	P-131N *			MeOH	P-343S
		MeOH	P-131S	Atrazine-desethyl-desisopropyl	3397-62-4	NEAT	P-428N
Aldoxycarb	see Aldicarb sulfone			Atrazine-desethyl-2-hydroxy	19988-24-0	Methyl cellosolve	P-544S-MC
Aldrin	309-00-2	NEAT	P-002N *			NEAT	P-345N
		MeOH	P-002S	Atrazine-desisopropyl	1007-28-9	MeOH	P-345S
Alfa-tox	see Diazinon			Atrazine-desisopropyl-2-hydroxy	7313-54-4	NEAT	P-344N
Allethrin	584-79-2	NEAT	P-267N			Methyl cellosolve	P-344S-MC
		MeOH	P-267S				
Allidochlor	93-71-0	NEAT	P-670N	Avadex	see Diallylate		
		MeOH	P-670S	Avid	see Abamectin		
Allisan	see Botran			Azaconazole NEW	60207-31-0	NEAT	P-971N
Altosid	see Methoprene					AcCN	P-971S-CN
Alloxydim-sodium	55635-13-7	NEAT	P-510N	Azaditrachtin	11141-17-6	MeOH	P-711S
		MeOH	P-510S	Azamethiphos	35575-96-3	NEAT	P-352N
Amaze	see Isofenphos					MeOH	P-352S
Ambush	see Permethrine			Azimsulfuron NEW	120162-55-2	50 µg/mL	P-1036S-CN-0.5X
Amdro	see Hydramethylnon					AcCN	
Ametotradin NEW	865318-97-4	MeOH	P-1039S	Azinphos-ethyl	2642-71-9	NEAT	P-201N
Ametryn	834-12-8	NEAT	P-003N			MeOH	P-201S
		MeOH	P-003S				

► Pesticides containing a carboxyl group may autoesterify in Methanol. These standards are intended for use as a post-esterification standard for GC analysis. For other types of analysis (ex. HPLC) we suggest a non-hydroxylic solvent such as Acetonitrile.

* V-Rated packaging surcharge applies for international shipments

* ColdPAK required to maintain integrity of product.



Pesticides

Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.

Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
Azinphos-methyl	86-50-0	NEAT	P-007N	Bethrodine	see Benfluralin		
		MeOH	P-007S	BHC Tech	608-73-1	NEAT	P-081N
Azocyclotin	41083-11-8	NEAT	P-353N			MeOH	P-081S
		MeOH	P-353S	α-BHC	319-84-6	NEAT	P-010N
Azoxystrobin	131860-33-8	NEAT	P-719N			MeOH	P-010S
		MeOH	P-719S	β-BHC	319-85-7	NEAT	P-011N
Barvel	see Dicamba					MeOH	P-011S
Barbamate	101-27-9	NEAT	P-202N	δ-BHC	319-86-8	NEAT	P-012N
		MeOH	P-202S			MeOH	P-012S
Barban	see Barbamate			γ-BHC	see Lindane		
Barben	see Azinphos-methyl			Bidrin	see Dicrotophos		
Barnon	52756-22-6	NEAT	P-646N	Bifenazate	149877-41-8	5 mg	P-772N-5MG
		MeOH	P-646S			MeOH	P-772S
Basagran	see Bentazon			Bifenox	42576-02-3	NEAT	P-257N
Basalin	see Fluchloralin					MeOH	P-257S
Basudin	see Diazinon			Bifenthrin	82657-04-3	NEAT	P-445N
Baythroid	see Cyfluthrin					MeOH	P-445S
Baycarb	3766-81-2	NEAT	P-347N	Biflex	see Bifenthrin		
		MeOH	P-347S	Binapacryl	485-31-4	NEAT	P-499N
Baycor	See Bitertanol					MeOH	P-499S
Bayfidan	see Triadimenol			Bioallethrin	28057-48-9	NEAT	P-665N
Baygon	114-26-1	NEAT	P-009N			MeOH	P-665S
		MeOH	P-009S	S-Bioallethrin	28424-00-6	NEAT	P-664N
Bayleton	see Triadimefon					MeOH	P-664S
Bayluscid	see Niclosamide			Bioresmethrin	28434-01-7	NEAT	P-594N
Baytan	see Triadimenol					MeOH	P-594S
Baytex	see Fenthion			Bitertanol	55179-31-2	NEAT	P-351N
Baythion	see Phoxim					MeOH	P-351S
Beam	see Tricyclazole			Bitrex	3734-33-6	NEAT	P-679N
Beflubutamid NEW	113614-08-7	NEAT	P-1041N			MeOH	P-679S
		MeOH	P-1041S	Bladafum	see Sulfotep		
Benalaxyl	71626-11-4	NEAT	P-559N	Bladan	see Parathion		
		MeOH	P-559S	Blattanex	see Baygon		
Benazolin	3813-05-6	NEAT	P-397N	Bloc	60168-88-9	NEAT	P-086N
		MeOH	P-397S			MeOH	P-086S
Bendiocarb	22781-23-3	NEAT	P-203N	B-Nine	see Alar		
		MeOH	P-203S	Bolero	see Thiobencarb		
Benefin	see Benfluralin			Bolstar	35400-43-2	NEAT	P-108N
Benelux	see Thiofanox					MeOH	P-108S
Benfluralin	1861-40-1	NEAT	P-237N	Bonzi	76738-62-0	NEAT	P-669N
		MeOH	P-237S			MeOH	P-669S
Benfuracarb	82560-54-1	NEAT	P-454N	Boscalid	188425-85-6	NEAT	P-811N
		MeOH	P-454S			MeOH	P-811S *
Benfuresate NEW	68505-69-1	NEAT	P-1080N	Botran	99-30-9	NEAT	P-013N
		MeOH	P-1080S			MeOH	P-013S
Benlate	see Benomyl			BPMC	see Baycarb		
Benodanil	15310-01-7	NEAT	P-671N	Bravo	see Chlorothalonil		
		MeOH	P-671S	Brigade	see Bifenthrin		
Benomyl	17804-35-2	NEAT	P-104N	Brodifacoum	56073-10-0	NEAT	P-677N
		AcCN	P-104S-CN *			MeOH	P-677S
Benoxacor	98730-04-2	NEAT	P-490N	Bromacil	314-40-9	NEAT	P-181N
		MeOH	P-490S			MeOH	P-181S
Bensulfuron-methyl	83055-99-6	NEAT	P-597N	Bromadiolone	28772-56-7	NEAT	P-316N
		MeOH	P-597S			MeOH	P-316S *
Bensulide	741-58-2	NEAT	P-204N	Bromex	see Naled		
		MeOH	P-204S	Brominal	1689-84-5	NEAT	P-256N
Bensultap	17606-31-4	NEAT	P-678N			MeOH	P-256S
		MeOH	P-678S	Bromobutide NEW	74712-19-9	MeOH	P-1059S
Bentazon ▶	25057-89-0	NEAT	P-177N	Bromofenoxim	13181-17-4	NEAT	P-511N
		Acetone	P-177S-A			MeOH	P-511S
		AcCN	P-177S-CN	Bromophos-ethyl	4824-78-6	NEAT	P-372N
Bentazon methyl	61592-45-8	NEAT	P-241N			MeOH	P-372S
		MeOH	P-241S	Bromophos-methyl	2104-96-3	NEAT	P-484N
Benthiavalicarb-isopropyl NEW	177406-68-7	10 µg/mL	P-1049S-A-0.1X			MeOH	P-484S
		Acetone		Bromopropylate	18181-80-1	NEAT	P-457N
Benthiocarb	see Thiobencarb					MeOH	P-457S
Benzofuroline	see Resmethrin			Bromoxynil	see Brominal		
Benzoximate	29104-30-1	AcCN	P-801S-CN	Bromoxynil-heptanoate	56634-95-8	MeOH	P-1012S
Benzoylprop ethyl	22212-55-1	NEAT	P-340N	Bromoxynil methyl ether	3336-39-8	NEAT	P-573N
		MeOH	P-340S			MeOH	P-573S
Betasan	see Bensulide						

► Pesticides containing a carboxyl group may autoesterify in Methanol. These standards are intended for use as a post-esterification standard for GC analysis. For other types of analysis (ex. HPLC) we suggest a non-hydroxylic solvent such as Acetonitrile.

* ColdPAK required to maintain integrity of product.



Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
Bromoxynil octanoate	1689-99-2	NEAT	P-550N	Chloramben methyl ester	7286-84-2	NEAT	P-272N
		MeOH	P-550S			MeOH	P-272S
Bromuconazol	116255-48-2	NEAT	P-843N	Chlorantraniliprole	500008-45-7	NEAT	P-952N
		AcCN	P-843S-CN			MeOH	P-952S
Bueno	2163-80-6	NEAT	P-279N	Chlorbenside	103-17-3	NEAT	P-107N
		MeOH	P-279S			MeOH	P-107S
Bupirimate	41483-43-6	NEAT	P-672N	Chlorbromuron	13360-45-7	NEAT	P-520N
		MeOH	P-672S			MeOH	P-520S
Buprofezin	69327-76-0	NEAT	P-595N	Chlorbufam	1967-16-4	NEAT	P-558N
		MeOH	P-595S			MeOH	P-558S
Busan	21564-17-0	AcCN	P-072S-CN	Chlordane (Tech)	12789-03-6	NEAT	P-017N
Butachlor	23184-66-9	NEAT	P-191N			MeOH	P-017S
		MeOH	P-191S	α -Chlordane	5103-71-9	NEAT	P-134N
Butafenacil	134605-64-4	NEAT	P-940N			MeOH	P-134S
		MeOH	P-940S			Hexane	P-134S-H
Butisan S	see Metazachlor			γ -Chlordane	5103-74-2	NEAT	P-135N
Butocarboxim	34681-10-2	NEAT	P-518N			MeOH	P-135S
		MeOH	P-518S	<i>cis</i> -Chlordane	see α -Chlordane		
Butocarboxim sulfoxide	34681-24-8	NEAT	P-701N	<i>trans</i> -Chlordane	see γ -Chlordane		
		MeOH	P-701S	Chlordecone	see Kepone		
Butoflin	see Deltamethrin			Chlordene	3734-48-3	NEAT	P-136N
Butox	see Deltamethrin					MeOH	P-136S
Butoxycarboxim	34681-23-7	NEAT	P-822N	Chlordimeform	6164-98-3	NEAT	P-333N
		AcCN	P-822S-CN			MeOH	P-333S
Butralin	33629-47-9	NEAT	P-574N	Chlorethoxyfos	54593-83-8	NEAT	P-1017N
		MeOH	P-574S			AcCN	P-1017S-CN
Buturon	3766-60-7	NEAT	P-301N	Chlorfenac	see Fenatrol		
		MeOH	P-301S	Chlorfenson	see Ovox		
Butylate	2008-41-5	NEAT	P-088N	Chlorfenapyr	122453-73-0	NEAT	P-807N
		MeOH	P-088S			MeOH	P-807S
Cadusafos	95465-99-9	NEAT	P-794N *	Chlorfenvinphos	470-90-6	NEAT	P-139N *
		MeOH	P-794S			MeOH	P-139S
Calcium arsenate NEW	7778-44-1	NEAT	P-1076N	Chlorfluazuron NEW	71422-67-8	AcCN	P-771S-CN *
		MeOH	P-1076S	Chlorfluorecol-methyl ester	2536-31-4	NEAT	P-401N
Calixin	see Tridemorph					MeOH	P-401S
Camphechlor	see Toxaphene			Chlorfluorecol	see Chlorfluorecol-methyl ester		
Caparol	see Prometryne			Chloridazon	see Pyrazon		
Captafol	2425-06-1	NEAT	P-254N	Chlorimuron-ethyl	90982-32-4	AcCN	P-284S-CN
		MeOH	P-254S	Chlormephos	24934-91-6	NEAT	P-329N
Captan	133-06-2	NEAT	P-182N			MeOH	P-329S
		MeOH	P-182S *	Chlormequat chloride	999-81-5	NEAT	P-338N
Capture	see Bifenthrin					MeOH	P-338S
Carbamult	see Promecarb			Chlorobenzilate	510-15-6	NEAT	P-133N
Carbaryl	63-25-2	NEAT	P-083N			AcCN	P-133S-CN
		MeOH	P-083S	Chloroea	see Monuron		
Carbendazim	10605-21-7	NEAT	P-278N	2-Chloro-2',6'-diethylacetanilide	6967-29-9	NEAT	P-620N
		MeOH	P-278S			MeOH	P-620S
Carbetamide	16118-49-3	NEAT	P-562N	2-Chloro-4-ethylamino-6-methylethylamino-s-triazine		NEAT	P-539N
		MeOH	P-562S			Methyl cellosolve	P-539S-MC
Carbexsin	see Oxycarboxin			2-Chloro-4-ethylamino-6-propylamino-s-triazine		NEAT	P-537N
Carbicron	see Dicrotophos					Methyl cellosolve	P-537S-MC
Carbofuran	1563-66-2	NEAT	P-106N	2-Chloro-4-methylamino-6-diethylamino-s-triazine		NEAT	P-541N
		MeOH	P-106S			Methyl cellosolve	P-541S-MC
Carbofuran phenol-3-ketone	17781-16-7	MeOH	P-630S	2-Chloro-4-methylamino-6-sec-butylamino-s-triazine		NEAT	P-540N
Carbophenothion	786-19-6	NEAT	P-095N			Methyl cellosolve	P-540S-MC
		MeOH	P-095S	Chloroneb	2675-77-6	NEAT	P-212N
Carbophenothion methyl-o-analog	10 μ g/mL in EtOAc	P-637S-EA-0.1X				MeOH	P-212S
Carbosulfan	55285-14-8	NEAT	P-446N	Chlorophacinone	3691-35-8	NEAT	P-314N
		MeOH	P-446S			MeOH	P-314S
Carboxin	5234-68-4	NEAT	P-216N				
		MeOH	P-216S				
Carbyne	see Barbamate						
Carfentrazone-ethyl NEW	128639-02-1	AcCN	P-957S-CN *				
Carpropamid NEW	104030-54-8	AcCN	P-1162S-CN				
Cartap	15263-53-3	MeOH	P-577S				
Cartap hydrochloride	22042-59-7	NEAT	P-949N				
CDEC	see Sulfallate						
Cekumethion	see Methyl parathion						
Chemathion	see Malathion						
Chinomethionate	2439-01-2	NEAT	P-399N				
		Acetone	P-399S-A				
Chloramben	133-90-4	NEAT	P-243N				
		MeOH	P-243S				

* V-Rated packaging surcharge applies for international shipments

** This product can not ship by air.

Most at Same Low Price in Neat (10 mg) or Solution (100 μ g/mL) form
Most Pesticides are available in 1000 μ g/mL (add -10X). Call or visit website for pricing.

Tel. 800-442-5290 / 203-786-5290 • Fax 203-786-5287 • AccuStandard.com



Pesticides

Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.

Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
2-Chloroethanol NEW	107-07-3	NEAT	P-1079N	Crimidine	535-89-7	NEAT	P-561N
		MeOH	P-1079S			MeOH	P-561S
1,1-bis(4-Chlorophenyl)ethylene NEW	2642-81-1	NEAT	P-1054N	<i>Crotoxyphos</i>	see Ciodrin		
		MeOH	P-1054S	Cruformate	299-86-5	NEAT	P-292N
Chloropropylate	5836-10-2	NEAT	P-213N			MeOH	P-292S
		MeOH	P-213S	Cryolite NEW	15096-52-3	NEAT	P-1071N
Chlorothalonil	1897-45-6	NEAT	P-222N	Cumyluron NEW	99485-76-4	AcCN	P-1135S-CN *
		MeOH	P-222S	<i>Curacron</i>	see Profenofos		
Chloroxuron	1982-47-4	NEAT	P-402N	Cyanazine	21725-46-2	NEAT	P-175N
		MeOH	P-402S			MeOH	P-175S
Chlorpropham	101-21-3	NEAT	P-221N	Cyanofenphos	13067-93-1	NEAT	P-584N
		MeOH	P-221S			MeOH	P-584S
<i>Chlorpyrifos</i>	see Dursban			Cyanophos	2636-26-2	NEAT	P-531N
Chlorpyrifos-methyl	5598-13-0	NEAT	P-223N			MeOH	P-531S
		MeOH	P-223S	Cyazofamid	120116-88-3	NEAT	P-969N
Chlorpyrifos-oxon	5598-15-2	NEAT	P-700N			MeOH	P-969S
		MeOH	P-700S	Cyclanilide NEW	113136-77-9	AcCN	P-982S-CN
Chlorsulfuron	64902-72-3	NEAT	P-262N	Cycloate	1134-23-2	NEAT	P-248N
		AcCN	P-262S-CN			MeOH	P-248S
<i>Chlorthal</i>	see DCPA diacid			Cycloheximide	66-81-9	MeOH	P-411N
Chlorthiamid	1918-13-4	NEAT	P-673N			MeOH	P-411S
		MeOH	P-673S	<i>2-Cyclohexyl-4,6-dinitrophenol</i>	see Dinex		
Chlorthion	500-28-7	MeOH	P-674S	Cycloprate NEW	54460-46-7	NEAT	P-1069N
Chlorthiophos	60238-56-4	NEAT	P-545N			MeOH	P-1069S
		MeOH	P-545S	Cycloxydime	101205-02-1	NEAT	P-735N
Chlortoluron	15545-48-9	NEAT	P-434N			MeOH	P-735S *
		MeOH	P-434S	Cycluron NEW	2163-69-1	AcCN	P-791S-CN *
Chlorzolinate	84332-86-5	AcCN	P-683S-CN	Cyflufenamide NEW	180409-60-3	AcCN	P-975S-CN *
Cinosulfuron	94593-91-6	NEAT	P-823N	Cyfluthrin	68359-37-5	NEAT	P-354N
		AcCN	P-823S-CN			MeOH	P-354S *
Ciodrin	7700-17-6	MeOH	P-218S	<i>Cygon</i>	see Dimethoate		
<i>CIPC</i>	see Chlorpropham			Cyhalofop-butyl	122008-85-9	5 mg	P-944N-5MG
Clarity	104040-79-1	H ₂ O	P-495S-W			MeOH	P-944S
<i>Classic</i>	see Chlorimuron-ethyl			λ-Cyhalothrin	91465-08-6	NEAT	P-473N
Clethodim	99129-21-2	AcCN	P-602S-CN *			MeOH	P-473S *
Clodinafop	114420-56-3	NEAT	P-1009N	Cyhexatin	13121-70-5	NEAT	P-375N
		MeOH	P-1009S			MeOH	P-375S
Clodinafop-propargyl NEW	105512-06-9	NEAT	P-755N	<i>Cyolane</i>	see Phosfolan		
		AcCN	P-755S-CN	Cymoxanil	57966-95-7	NEAT	P-493N
Clofentezine	74115-24-5	NEAT	P-472N			MeOH	P-493S *
		MeOH	P-472S	Cypermethrin	52315-07-8	NEAT	P-225N
Clomazon	81777-89-1	MeOH	P-286S			MeOH	P-225S *
Clomeprop NEW	84496-56-0	5 mg	P-1065N-5MG	α-Cypermethrin	67375-30-8	NEAT	P-548N
		Acetone	P-1065S-A			AcCN	P-548S-CN
<i>Clopyralid</i>	see Lontrel			<i>cis-Cypermethrin</i>	see a-Cypermethrin		
Clopyralid methyl ester	1532-24-7	MeOH	P-488S	Cyphenothrin	39515-40-7	NEAT	P-709N
Cloquintocet-mexyl	99607-70-2	NEAT	P-929N			MeOH	P-709S
		MeOH	P-929S	<i>Cypona</i>	see Dichlorvos		
Cloransulam methyl	147150-35-4	AcCN	P-981S-CN	Cyprazine	22936-86-3	NEAT	P-420N
Clothianidin	210880-92-5	NEAT	P-947N			MeOH	P-420S
		MeOH	P-947S			Hexane	P-420S-H
<i>CMU</i>	see Monuron			Cyproconazole (Tech)	113096-99-4	MeOH	P-555S
<i>Comite</i>	see Propargite			Cyprodinil	121552-61-2	NEAT	P-720N
<i>Command</i>	see Clomazone					MeOH	P-720S
<i>Confidor</i>	see Imidacloprid			Cyprofuram NEW	69581-33-5	NEAT	P-1272N
<i>Conrac</i>	see Bromadiolone					MeOH	P-1272S
Copper (II) carbonate NEW	12069-69-1	NEAT	P-1074N	Cyromazine	66215-27-8	NEAT	P-296N
		MeOH	P-1074S			MeOH	P-296S
Copper oxychloride	1332-40-7	NEAT	P-458N	<i>Cythion</i>	see Malathion		
<i>Cornox</i>	see MCPA acid			2,3-D acid ▶	2976-74-1	NEAT	P-470N
<i>Cotoran</i>	see Fluometuron					MeOH	P-470S
Coumachlor	81-82-3	MeOH	P-684S			AcCN	P-470S-CN
<i>Coumaphene</i>	see Warfarin			2,4-D acid ▶	94-75-7	NEAT	P-020N
Coumaphos	56-72-4	NEAT	P-019N			MeOH	P-020S
		MeOH	P-019S			AcCN	P-020S-CN
Coumatetralyl	5836-29-3	NEAT	P-313N	2,6-D acid ▶	575-90-6	NEAT	P-690N
		MeOH	P-313S			MeOH	P-690S
<i>Counter</i>	see Terbufos					AcCN	P-690S-CN
4-CPA	122-88-3	NEAT	P-373N	2,4-D butoxyethyl ester	1929-73-3	NEAT	P-438N
		MeOH	P-373S	2,4-D butyl ester	94-80-4	NEAT	P-712N
						MeOH	P-712S *

Most at Same Low Price in Neat (10 mg) or Solution (100 µg/mL) form
Can't find a Pesticide? Search using CAS No. Index in back of the catalog.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001



Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
2,4-D ethyl ester	533-23-3	NEAT	P-636N	Demeton (mixed isomers)	8065-48-3	NEAT	P-031N
		MeOH	P-636S			MeOH	P-031S
2,4-D ethylhexyl ester	1928-43-4	NEAT	P-439N	Demeton-S	126-75-0	NEAT	P-271N
		Hexane	P-439S-H			MeOH	P-271S
2,4-D isobutyl ester	1713-15-1	NEAT	P-1027N	Demeton-S-methyl	919-86-8	NEAT	P-482N
		AcCN	P-1027S-CN			MeOH	P-482S
2,4-D methyl ester	1928-38-7	NEAT	P-021N	Demeton-S-methylsulfone	17040-19-6	NEAT	P-554N
		MeOH	P-021S			MeOH	P-554S
2,6-D methyl ester		NEAT	P-691N	Demosan	see Chloroneb		
		MeOH	P-691S	Desethylterbutylazine	see Terbutylazin desethyl		
Dacamox	see Thiofanox			Desmedipham	13684-56-5	NEAT	P-376N
Daconil	see Chlorothalonil					MeOH	P-376S
Dacthal diacid	see DCPA diacid			Desmel	see Tilt		
Dacthal monoacid	see Monomethyl tetrachloroterephthalate			Desmetryn	1014-69-3	NEAT	P-566N
Dacthal	1861-32-1	NEAT	P-196N			MeOH	P-566S
		MeOH	P-196S	Devrinol	see Napropamide		
Daimuron NEW	42609-52-9	AcCN	P-1087S-CN *	Dexon	see Fenaminosulf		
Dalapon acid ►	75-99-0	NEAT	P-140N	Diafenthiuron NEW	80060-09-9	NEAT	P-1064N
		MeOH	P-140S			Acetone	P-1064S-A
		AcCN	P-140S-CN	Dialifor	see Dialifos		
Dalapon methyl ester	17640-02-7	NEAT	P-226N	Dialifos	10311-84-9	NEAT	P-426N
		MeOH	P-226S			MeOH	P-426S
Daminozide	see Alar			Diallate	2303-16-4	NEAT	P-142N
Danicut	see Amitraz					MeOH	P-142S
Danitol	39515-41-8	NEAT	P-263N	Diazinon	333-41-5	NEAT	P-033N
		MeOH	P-263S			MeOH	P-033S
Dasanit	115-90-2	NEAT	P-235N	Diazinon-o-analog	962-58-3	NEAT	P-640N
		MeOH	P-235S			Acetone	P-640S-A
Dazomet	533-74-4	NEAT	P-469N	Dibam	128-04-1	NEAT	P-487N
		MeOH	P-469S			MeOH	P-487S
2,4-DB acid ►	94-82-6	NEAT	P-141N	Dibrom	see Naled		
		MeOH	P-141S	Dibutylchloredate	1770-80-5	NEAT	P-109N
		AcCN	P-141S-CN			MeOH	P-109S
2,4-DB methyl ester	18625-12-2	NEAT	P-228N	Dicamba ►	1918-00-9	NEAT	P-008N
		MeOH	P-228S			MeOH	P-008S
						AcCN	P-008S-CN
DBCP	see Fumazone			Dicamba diglycolamine (tech)	see Clarity		
DCMU	see Karmex			Dicamba methyl ester	6597-78-0	NEAT	P-071N
DCNA	see Botran					MeOH	P-071S
DCPA	see Dacthal			Dicaptan	see Dicapthon		
DCPA diacid ►	2136-79-0	NEAT	P-320N	Dicapthon	2463-84-5	NEAT	P-035N
		MeOH	P-320S			MeOH	P-035S
		AcCN	P-320S-CN	Dichlobenil	1194-65-6	NEAT	P-275N
o,p'-DDD	53-19-0	NEAT	P-024N			MeOH	P-275S
		MeOH	P-024S	Dichlofenthion	97-17-6	NEAT	P-211N
o,p'-DDE	3424-82-6	NEAT	P-026N			MeOH	P-211S
		MeOH	P-026S	Dichlofluanid	1085-98-9	NEAT	P-474N
o,p'-DDT	789-02-6	NEAT	P-028N			MeOH	P-474S
		MeOH	P-028S	Dichlone	117-80-6	NEAT	P-253N
p,p'-DDA	83-05-6	NEAT	P-444N			MeOH	P-253S
		MeOH	P-444S	Dichloran	see Botran		
p,p'-DDD	72-54-8	NEAT	P-025N	Dichlormid	37764-25-3	NEAT	P-675N
		MeOH	P-025S			MeOH	P-675S
p,p'-DDE	72-55-9	NEAT	P-027N	3,5-Dichloroaniline	626-43-7	NEAT	P-1008N
		MeOH	P-027S			MeOH	P-1008S
p,p'-DDT	50-29-3	NEAT	P-029N	3,6-Dichloroanisic acid	see Clarity		
		MeOH	P-029S	2,6-Dichlorobenzamide	2008-58-4	NEAT	P-1035N
DDT (Tech)	50-29-3	NEAT	P-346N			MeOH	P-1035S
		MeOH	P-346S	3,5-Dichlorobenzoic acid ►	51-36-5	NEAT	P-242N
		AcCN	P-346S-CN			MeOH	P-242S
4,4'-DDMU	1022-22-6	NEAT	P-424N			AcCN	P-242S-CN
		MeOH	P-424S	4,4'-Dichlorobenzophenone	90-98-2	NEAT	P-295N
DDVP	see Dichlorvos					MeOH	P-295S
Dechlorane	see Mirex			2,4-Dichloro-6-ethylamino-s-triazine		NEAT	P-538N
Decis	see Deltamethrin					MC	P-538S-MC
Dedevap	see Dichlorvos			2,3-Dichloronitrobenzene	3209-22-1	NEAT	P-1005N
Deet	134-62-3	NEAT	P-255N			MeOH	P-1005S-T
		MeOH	P-255S	2,4-Dichlorophenylacetic acid ►	19719-28-9	NEAT	P-244N
DEF 6	78-48-8	NEAT	P-150N			MeOH	P-244S
		MeOH	P-150S			AcCN	P-244S-CN
Delnav	see Dioxathion			3-(2,3-Dichlorophenyl)-1,1-dimethylurea	see 2,3-Diuron		
Deltamethrin	52918-63-5	NEAT	P-355N				
		MeOH	P-355S				

► Pesticides containing a carboxyl group may autoesterify in Methanol. These standards are intended for use as a post-esterification standard for GC analysis. For other types of analysis (ex. HPLC) we suggest a non-hydroxylic solvent such as Acetonitrile.

* ColdPAK required to maintain integrity of product.



Pesticides

Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.

Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
Dichlorophen	97-23-4	NEAT	P-232N	Dimethyl phosphate	813-78-5	NEAT	P-442N
		MeOH	P-232S			MeOH	P-442S
1-(3,4-Dichlorophenyl)-3-methylurea NEW	3567-62-2	NEAT	P-1038N	N-(2,4-Dimethylphenyl)formamide	60397-77-5	AcCN	P-1100S-CN *
		MeOH	P-1038S		NEW		
2,4-Dichlorophenylacetic acid Me				Dimetilan NEW	644-64-4	AcCN	P-905S-CN
see Methyl-2,4-dichlorophenylacetate				Dimoxystrobin	149961-52-4	AcCN	P-844S-CN
Dichlorprop	120-36-5	NEAT	P-143N	Dinex	131-89-5	NEAT	P-427N
		MeOH	P-143S			MeOH	P-427S
		AcCN	P-143S-CN	Diniconazol	83657-24-3	NEAT	P-845N
Dichlorprop methyl ester	57153-17-0	NEAT	P-229N			AcCN	P-845S-CN
		MeOH	P-229S	Dinitramine	29091-05-2	NEAT	P-575N
Dichlorvos	62-73-7	NEAT	P-036N			MeOH	P-575S
		MeOH	P-036S	4,6-Dinitro-o-cresol	534-52-1	NEAT	P-384N
Diclobutrazol	75736-33-3	NEAT	P-641N			MeOH	P-384S
		AcCN	P-641S-CN	Dinocap	39300-45-3	NEAT	P-288N
Diclofop	40843-25-2	NEAT	P-514N			MeOH	P-288S
		MeOH	P-514S	Dinoseb	88-85-7	NEAT	P-144N
Diclofop methyl	51338-27-3	NEAT	P-303N			MeOH	P-144S
		MeOH	P-303S	Dinoseb acetate	2813-95-8	NEAT	P-779N
Diclosulam NEW	145701-21-9	NEAT	P-904N			MeOH	P-779S
		MeOH	P-904S	Dinoseb methyl ether	6099-79-2	NEAT	P-230N
o,p'-Dicofol	10606-46-9	NEAT	P-606N			MeOH	P-230S
		MeOH	P-606S	Dinoterb	1420-07-1	NEAT	P-524N
Dicofol	see Kelthane					MeOH	P-524S
Dicrotophos	141-66-2	NEAT	P-178N	Dioxacarb	6988-21-2	NEAT	P-264N
		MeOH	P-178S			MeOH	P-264S
Dieldrin	60-57-1	NEAT	P-037N *	Dioxathion	78-34-2	NEAT	P-219N
		MeOH	P-037S			MeOH	P-219S
Dieltamid	see Deet			Diphacinone	82-66-6	NEAT	P-315N
Diethatyl ethyl	38727-55-8	NEAT	P-599N			MeOH	P-315S *
		MeOH	P-599S	Diphenamid	957-51-7	NEAT	P-173N
Diethofencarb	87130-20-9	NEAT	P-744N			MeOH	P-173S
		MeOH	P-744S	Dipropetryn	4147-51-7	NEAT	P-580N
Diethylphosphate	598-02-7	NEAT	P-534N			MeOH	P-580S
		MeOH	P-534S	Diquat dibromide monohydrate	6385-62-2	NEAT	P-231N
Diethyl phosphate (mono- & di-)	598-02-7	NEAT	P-443N			MeOH	P-231S
		MeOH	P-443S	Disul-sodium salt	136-78-7	NEAT	P-513N
Difenacoum NEW	56073-07-5	AcCN	P-1151S-CN			MeOH	P-513S
Difenoconazole	119446-68-3	NEAT	P-447N	Disulfoton	298-04-4	NEAT	P-042N *
		MeOH	P-447S			MeOH	P-042S
Difenoxyuron	14214-32-5	NEAT	P-604N	Disulfoton sulfone	2497-06-5	NEAT	P-582N
		MeOH	P-604S			MeOH	P-582S
Diffubenzuron	35367-38-5	NEAT	P-377N	Disulfoton sulfoxide	2497-07-6	NEAT	P-593N
		MeOH	P-377S			MeOH	P-593S
Diffufenican	83164-33-4	NEAT	P-722N	Disyston	see Disulfoton		
		MeOH	P-722S	Ditalimfos	5131-24-8	NEAT	P-546N
2,3-Dihydro-2,2-dimethylbenzofuran-7-ol		NEAT	P-628N			MeOH	P-546S
	1563-38-8	MeOH	P-628S	Dithane D-14	see Nabam		
Dimecron	see Phosphamidon			Dithianon	3347-22-6	NEAT	P-725N
Dimefox	115-26-4	NEAT	P-299N			Acetone	P-725S-A
		MeOH	P-299S	Dithiopyr	97886-45-8	NEAT	P-741N
Dimefuron	34205-21-5	NEAT	P-565N			MeOH	P-741S
		MeOH	P-565S	Diuron	see Karmex		
Dimepax	22936-75-0	NEAT	P-643N	2,3-Diuron	10290-37-6	NEAT	P-632N
		MeOH	P-643S			MeOH	P-632S
Dimepiperate	61432-55-1	50 µg/mL	P-1020S-A-0.5X	DMST	66840-71-9	MeOH	P-572S
		Acetone		DNBP	see Dinoseb		
Dimetate	see Dimethoate			DNOC	see 4,6-Dinitro-o-cresol		
Dimethachlor	50563-36-5	NEAT	P-642N	DNTP	see Parathion		
		MeOH	P-642S	Dodemorph acetate	31717-87-0	NEAT	P-385N
Dimethenamid	87674-68-8	NEAT	P-747N			MeOH	P-385S
		MeOH	P-747S	Dodine	2439-10-3	NEAT	P-386N
Dimethenamide-P	163515-14-8	NEAT	P-934S			MeOH	P-386S
		MeOH	P-934S	Doguidine	see Dodine		
Dimethipin	55290-64-7	NEAT	P-483N	Doramectin NEW	117704-25-3	NEAT	P-935N
		MeOH	P-483S			AcCN	P-935S-CN
Dimethoate	60-51-5	NEAT	P-039N	Dowpon	see Dalapon acid		
		MeOH	P-039S	Dozer	see Fenuron-TCA		
Dimethomorph	110488-70-5	NEAT	P-713N	2,4-DP ethyl hexyl	79270-78-3	NEAT	P-429N
		MeOH	P-713S			MeOH	P-429S
Dimethylarsinic acid NEW	75-60-5	NEAT	P-1075N				
		MeOH	P-1075S				
Dimethylvinphos (Z type) NEW	67628-93-7	Acetone	P-1057S-A				

* V-Rated packaging surcharge applies for international shipments

Most at Same Low Price in Neat (10 mg) or Solution (100 µg/mL) form

Most Pesticides are available in 1000 µg/mL (add -10X). Call or visit website for pricing.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001



Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
<i>Drinox</i>	see Heptachlor			Ethiolat NEW	2941-55-1	NEAT	P-785N
<i>Dropp</i>	see Thidiazuron					AcCN	P-785S-CN
DSMA	144-21-8	NEAT	P-598N	Ethion	563-12-2	NEAT	P-048N
		MeOH	P-598S			MeOH	P-048S
<i>DTMC</i>	see Kelthane			Ethiprole NEW	181587-01-9	NEAT	P-964N
<i>Dual</i>	see Metolachlor					AcCN	P-964S-CN
Dursban	2921-88-2	NEAT	P-094N	Ethiozin	64529-56-2	NEAT	P-660N
		MeOH	P-094S			MeOH	P-660S
<i>Dybar</i>	see Fenuron			Ethirimol	23947-60-6	NEAT	P-645N
Dyfonate	944-22-9	NEAT	P-087N			MeOH	P-645S
		MeOH	P-087S	Ethofumesate	26225-79-6	NEAT	P-387N
		Hexane	P-087S-H			MeOH	P-387S
<i>Dylox</i>	see Trichlorfon			Ethoprop	13194-48-4	NEAT	P-129N
<i>Dymid</i>	see Diphenamid					MeOH	P-129S
<i>Dyrene</i>	see Anilazine			Ethoxyquin	91-53-2	NEAT	P-388N
EDDP	see Edifenphos					MeOH	P-388S
Edifenphos	17109-49-8	NEAT	P-368N	Ethoxysulfuron	126801-58-9	NEAT	P-847N
		MeOH	P-368S			AcCN	P-847S-CN
<i>Ektafos</i>	see Dicrotophos			Ethyl carbamate	51-79-6	NEAT	P-419N
<i>Elgetol</i>	see 4,6-Dinitro-o-cresol					MeOH	P-419S
<i>Eloncron</i>	see Dioxacarb			<i>Ethylene bisdithiocarbamate, disodium</i>	see Nabam		
Emamectin-benzoate	155569-91-8	5 mg	P-996N-5MG				
		MeOH	P-996S	Ethylene thiourea	96-45-7	NEAT	P-588N
Empenthrin	54406-48-3	NEAT	P-708N			MeOH	P-588S
Endosulfan I	959-98-8	NEAT	P-091N	Ethyl hexanediol (mixed isomers)	94-96-2	NEAT	P-389N
		MeOH	P-091S			MeOH	P-389S
Endosulfan II	33213-65-9	NEAT	P-092N	bis(2-Ethylhexyl)adipate	103-23-1	NEAT	P-233N
		MeOH	P-092S			MeOH	P-233S
<i>α-Endosulfan</i>	see Endosulfan I			<i>Ethyl parathion</i>	see Parathion		
<i>β-Endosulfan</i>	see Endosulfan II			2-Ethylthiomethyl phenol		MeOH	P-423S
Endosulfan, mixed isomers	115-29-7	NEAT	P-435N	Etobenzanid NEW	79540-50-4	AcCN	P-1136S-CN *
		MeOH	P-435S	Etopenprox	80844-07-1	NEAT	P-848N
Endosulfan sulfate	1031-07-8	NEAT	P-145N			AcCN	P-848S-CN
		MeOH	P-145S	Etoazole	153233-91-1	MeOH	P-991S
Endothall	145-73-3	NEAT	P-183N	<i>Etridiazole</i>	see Terrazole		
		MeOH	P-183S	Etrifos	38260-54-7	NEAT	P-480N
Endothall dimethyl ester		NEAT	P-603N			MeOH	P-480S
		MeOH	P-603S	<i>Etolene</i>	see Ronnel		
Endrin	72-20-8	NEAT	P-045N	<i>ETU</i>	see Ethylene thiourea		
		MeOH	P-045S	<i>Expand</i>	see Sethoxydim		
Endrin aldehyde	7421-93-4	NEAT	P-046N	<i>Famophos</i>	see Famphur		
		MeOH	P-046S	Famoxadon	131807-57-3	AcCN	P-849S-CN
Endrin ketone	53494-70-5	NEAT	P-146N	Famphur	52-85-7	NEAT	P-147N
		MeOH	P-146S			MeOH	P-147S
<i>Enide</i>	see Diphenamid			<i>Fargo</i>	see Triallate		
EPN	2104-64-5	NEAT	P-220N *	<i>Fenac</i>	see Fenatrol		
		Acetone	P-220S-A	Fenamidone	161326-34-7	NEAT	P-850N
Epoxiconazole	135319-73-2	NEAT	P-784N			AcCN	P-850S-CN
		MeOH	P-784S	Fenamiosulf	140-56-7	NEAT	P-058N
<i>Eptam</i>	see EPTC					MeOH	P-058S
<i>Eptapur</i>	see Buturon			Fenamiphos	22224-92-6	NEAT	P-114N
EPTC	759-94-4	NEAT	P-238N			MeOH	P-114S
		MeOH	P-238S	Fenamiphos sulfone	31972-44-8	NEAT	P-623N
Esfenvalerate	66230-04-4	NEAT	P-525N			MeOH	P-623S
		MeOH	P-525S *	Fenamiphos sulfoxide	31972-43-7	NEAT	P-622N
Esprocarb NEW	85785-20-2	MeOH	P-617S			MeOH	P-622S
Etaconazole	60207-93-4	NEAT	P-644N	<i>Fenarimol</i>	see Bloc		
		MeOH	P-644S	Fenatrol	85-34-7	NEAT	P-319N
<i>Etazine</i>	see Secbumeton					MeOH	P-319S
Ethaboxam NEW	162650-77-3	AcCN	P-1115S-CN	Fenazaquin	120928-09-8	Hexane	P-787S-H
Ethalfuralin	55283-68-6	NEAT	P-269N	Fenbuconazole	114369-43-6	NEAT	P-662N
		MeOH	P-269S			MeOH	P-662S
Ethanedial dioxime NEW	557-30-2	NEAT	P-1070N	Fenbutatin oxide	13356-08-6	NEAT	P-481N
		MeOH	P-1070S			Acetone	P-481S-A
Ethephon	16672-87-0	NEAT	P-239N	<i>Fenchlorphos</i>	see Ronnel		
		MeOH	P-239S	Fenfuram NEW	24691-80-3	NEAT	P-896N
Ethidimuron	30043-49-3	NEAT	P-364N			MeOH	P-896S
		MeOH	P-364S	Fenhexamid	126833-17-8	NEAT	P-783N
Ethiofencarb	29973-13-5	NEAT	P-448N			MeOH	P-783S
		MeOH	P-448S	Fenitrothion	122-14-5	NEAT	P-259N
Ethiofencarb sulfone	53380-23-7	AcCN	P-824S-CN			MeOH	P-259S
Ethiofencarb sulfoxide	53380-22-6	AcCN	P-825S-CN	<i>Fenoprop</i>	see Silvex		
<i>Ethiofencarb metabolite</i>							
	see 2-Ethylthiomethyl phenol						

► Pesticides containing a carboxyl group may autoesterify in Methanol. These standards are intended for use as a post-esterification standard for GC analysis. For other types of analysis (ex. HPLC) we suggest a non-hydroxylic solvent such as Acetonitrile.

* ColdPAK required to maintain integrity of product.



Pesticides

Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.

Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
Fenothiocarb	62850-32-2	MeOH 50 µg/mL MeOH	P-1021S P-1021S-0.5X	Flufenacet NEW	142459-58-3	AcCN	P-902S-CN
Fenoxanil	115852-48-7	NEAT MeOH	P-997N P-997S	Flufenoxuron	101463-69-8	NEAT MeOH	P-687N P-687S
Fenoxaprop	95617-09-7	NEAT MeOH	P-884N P-884S	Flumetralin	62924-70-3	NEAT MeOH	P-491N P-491S
Fenoxaprop-ethyl	66441-23-4	NEAT MeOH	P-365N P-365S	Flumetsulam	98967-40-9	NEAT MeOH	P-659N P-659S
Fenoxaprop-p-ethyl	71283-80-2	NEAT MeOH	P-694N P-694S	Flumiclorac-pentyl	87546-18-7	NEAT MeOH	P-993N P-993S
Fenoxycarb	79127-80-3	NEAT MeOH	P-686N P-686S	Flumioxazin	103361-09-7	CH ₂ Cl ₂	P-992S-D
Fenpropathrin	see Danitol			Fluometuron	2164-17-2	NEAT MeOH	P-014N P-014S
Fenpropidin	67306-00-7	NEAT MeOH	P-802N P-802S	Fluopicolide	239110-15-7	NEAT Acetone	P-1024N P-1024S-A
Fenpropimorph	67564-91-4	NEAT MeOH	P-705N P-705S	Fluopyram NEW	658066-35-4	MeOH	P-1094S
Fenpyroximate	111812-58-9	NEAT MeOH	P-724N P-724S	Fluoxastrobin NEW	361377-29-9	AcCN	P-963S-CN *
Fenson	80-38-6	NEAT MeOH	P-551N P-551S	Fluquinconazole NEW	136426-54-5	NEAT AcCN	P-878N P-878S-CN
Fensulfthion	see Dasanit			Flurenol methyl ester	1216-44-0	NEAT MeOH	P-412N P-412S
Fenthion	55-38-9	NEAT MeOH	P-148N P-148S	Fluridone	59756-60-4	NEAT MeOH	P-193N P-193S
Fenthion-sulfone NEW	3761-42-0	AcCN	P-953S-CN	Flurochloridon	61213-25-0	NEAT MeOH	P-647N P-647S
Fenthion sulfoxide NEW	3761-41-9	NEAT CH ₂ Cl ₂	P-1052N P-1052S-D	Flurodifen	15457-05-3	NEAT MeOH	P-676N P-676S
Fentin acetate	900-95-8	NEAT MeOH	P-680N P-680S	Fluoroxypyr	69377-81-7	MeOH	P-521S
Fentin chloride	see Triphenyltin chloride			Fluoroxypyr-1-methylheptyl ester	81406-37-3	NEAT MeOH	P-927N P-927S
Fentin hydroxide NEW	76-87-9	NEAT AcCN	P-1042N P-1042S-CN	Flurprimidol NEW	56425-91-3	NEAT	P-1155N
Fenuron	101-42-8	NEAT MeOH	P-004N P-004S	Flusilazole	85509-19-9	NEAT MeOH	P-578N P-578S
Fenuron-TCA	4482-55-7	NEAT MeOH	P-006N P-006S	Fluthiacet-methyl NEW	117337-19-6	AcCN	P-1095S-CN *
Fenvalerate	51630-58-1	NEAT MeOH	P-194N P-194S *	Flutolanil	66332-96-5	NEAT MeOH	P-587N P-587S
Ferbam	14484-64-1	NEAT MeOH	P-110N P-110S	Flutriafol	76674-21-0	NEAT MeOH	P-699N P-699S
Ferber K	see Ferbam			Tau-Fluvalinate	102851-06-9	NEAT MeOH	P-356N P-356S
Ficam	see Bendiocarb			Fluxapyroxad NEW	907204-31-3	AcCN	P-356S-CN
Fipronil	120068-37-3 See Technical Data, page 66	NEAT MeOH Acetone	P-738N P-738S * P-738S-A	Folbex	see Chlorobenzilate		
Fipronil desulfinyl		Acetone	P-782S-A	Folex	see Merphos		
Fipronil sulfide	120067-83-6	Acetone 5 mg	P-781S-A P-781N-5MG	Folosan	see Pentachloronitrobenzene		
Fipronil sulfone	120068-36-2	Acetone	P-780S-A	Folpet	133-07-3	NEAT MeOH	P-258N P-258S
Flamprop-methyl	52756-25-9	NEAT MeOH	P-366N P-366S	Fomesafen	72178-02-0	NEAT MeOH	P-907N P-907S
Flazasulfuron	104040-78-0	AcCN	P-826S-CN	Fonofos	see Dyfonate		
Flonicamid	158062-67-0	NEAT MeOH	P-926N P-926S	Foramsulfuron	173159-57-4	NEAT AcCN	P-852N P-852S-CN
Florasulam	145701-23-1	AcCN	P-827S-CN-0.1X	Forchlorfenuron NEW	68157-60-8	NEAT MeOH	P-753N P-753S
Fluacrypyrim NEW	229977-93-9	MeOH	P-1056S	Formetanate HCl	23422-53-9	NEAT MeOH	P-431N P-431S
Fluazifop-butyl	69806-50-4	NEAT MeOH	P-310N P-310S	Formothion	2540-82-1	NEAT AcCN	P-149N P-149S-CN
Fluazifop-p-butyl	79241-46-6	NEAT MeOH	P-601N P-601S	Fosetyl aluminum	39148-24-8	NEAT MeOH	P-532N P-532S
Fluazinam	79622-59-6	NEAT MeOH	P-586N P-586S	Fosthiazate NEW	98886-44-3	AcCN	P-828S-CN
Flubendiamide	272451-65-7	NEAT AcCN	P-1025N P-1025S-CN	Frescon	see Trifenmorph		
Flucarbazone-sodium NEW	181274-17-9	NEAT AcCN	P-1124N P-1124S-CN	Frumidor	see Thiophanate-methyl		
Fluchloralin	33245-39-5	NEAT MeOH	P-270N P-270S	Fuberidazole NEW	3878-19-1	AcCN	P-789S-CN *
Flucythrinate	70124-77-5	MeOH	P-378S *	Fumazone	96-12-8	NEAT MeOH	P-341N P-341S
Fludioxonil	131341-86-1	NEAT MeOH	P-698N P-698S	Furadan	see Carbofuran		
				Furalaxyl	57646-30-7	NEAT MeOH	P-605N P-605S
				Furathiocarb	65907-30-4	NEAT MeOH	P-569N P-569S
				Furilazole NEW	121776-33-8	AcCN	P-810S-CN
				Furmecyclox	60568-05-0	MeOH	P-607S

Most at Same Low Price in Neat (10 mg) or Solution (100 µg/mL) form
Can't find a Pesticide? Search using CAS No. Index in back of the catalog.



Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
<i>Furore</i>	see Fenoxaprop-ethyl			<i>Hoxan</i>	see Dichlofop methyl		
<i>Fusilade</i>	see Fluazifop-butyl			Hydramethylnon	67485-29-4	NEAT	P-403N
<i>Galtak</i>	see Benazolin					MeOH	P-403S
<i>Gardona</i>	see Tetrachlorvinphos			2-Hydroxyatrazine	2163-68-0	MeOH	P-326S
<i>Gardoprim</i>	see Terbutylazine			3-Hydroxycarbofuran	16655-82-6	MeOH	P-186S
<i>Garlon</i>	see Triclopyr			1-Hydroxychloridene	24009-05-0	MeOH	P-151S
<i>Garrathion</i>	see Carbophenothion			Hymexazol	10004-44-1	MeOH	P-571S
<i>Gesafram</i>	see Prometon			<i>Hyvar</i>	see Bromacil		
<i>Gesagard</i>	see Prometryne			<i>Illoxan</i>	see Dichlofop methyl		
<i>Gesamil</i>	see Propazine			Imazalil	35554-44-0	NEAT	P-332N
<i>Gesapax</i>	see Ametryn					MeOH	P-332S
<i>Gesaprim</i>	see Atrazine			Imazamethabenz methyl	81405-85-8	NEAT	P-414N
Gesatamine	1610-17-9	NEAT	P-189N			MeOH	P-414S
		MeOH	P-189S	Imazamox NEW	114311-32-9	NEAT	P-806N
<i>Gesatop</i>	see Simazine					AcCN	P-806S-CN
<i>Gexane</i>	see Lindane			Imazapic NEW	104098-48-8	NEAT	P-1063N
Glufosinate, ammonium salt	77182-82-2	NEAT	P-475N			MeOH	P-1063S
		MeOH	P-475S	Imazapyr	81334-34-1	NEAT	P-589N
Glyodin	556-22-9	NEAT	P-528N			MeOH	P-589S
		MeOH	P-528S			AcCN	P-589S-CN
Glyphosate	1071-83-6	NEAT	P-015N	Imazaquin	81335-37-7	NEAT	P-283N
		H2O	P-015S-W			MeOH	P-283S *
<i>Goal</i>	see Oxyfluorfen			Imazethapyr	81335-77-5	MeOH	P-285S
<i>Goltix</i>	see Metamitron			Imazosulfuron	122548-33-8	AcCN	P-853S-CN-0.1X
<i>Grasidin</i>	see Sethoxydim					10 µg	
<i>Grasp</i>	see Tralkoxydim			Imibenconazole	86598-92-7	AcCN	P-1019S-CN-0.5X
Guazatine acetate	115044-19-4	MeOH	P-612S			50 µg	
<i>Gusathion M</i>	see Azinphos-methyl			Imidacloprid	138261-41-3	NEAT	P-596N
<i>Guthion</i>	see Azinphos-methyl					MeOH	P-596S
<i>Gy-bon</i>	see Simetryn			Imidan	732-11-6	NEAT	P-055N
Halfenprox NEW	111872-58-3	10 µg/mL	P-1050S-0.1X			MeOH	P-055S
		MeOH		Imiprothrin NEW	72963-72-5	AcCN	P-983S-CN *
Halofenozide NEW	112226-61-6	AcCN	P-804S-CN *	Indalone	532-34-3	NEAT	P-648N
Halosulfuron methyl NEW	100784-20-1	AcCN	P-1089S-CN *			MeOH	P-648S
Haloxypop	69806-34-4	NEAT	P-496N	Indanofan	133220-30-1	NEAT	P-988N
		MeOH	P-496S			MeOH	P-988S
		AcCN	P-496S-CN	Indaziflam NEW	950782-86-2	AcCN	P-1168S-CN
Haloxypop-methyl	69806-40-2	NEAT	P-497N	Indoxacarb	144171-61-9	NEAT	P-829N
		MeOH	P-497S			AcCN	P-829S-CN
<i>Hanane</i>	see Dimefox			<i>Ingran 80W</i>	see Prebane		
<i>Hedonal</i>	see MCPP acid			<i>INPC</i>	see Propham		
<i>Helothion</i>	see Bolstar			Iodofenphos	18181-70-9	NEAT	P-379N
<i>HEOD</i>	see Dieldrin					MeOH	P-379S
Heptachlor	76-44-8	NEAT	P-053N	Iodosulfuron-methyl-sodium	144550-36-7	NEAT	P-830N
		MeOH	P-053S			AcCN	P-830S-CN
Heptachlor epoxide [Isomer A]	28044-83-9	MeOH	P-294S	Ioxynil	1689-83-4	NEAT	P-522N
Heptachlor epoxide [Isomer B]	1024-57-3	NEAT	P-054N			MeOH	P-522S
		MeOH	P-054S	<i>IPB</i>	see Iprobenfos		
<i>2-Hepta-decyl-2-imidazoline</i>	see Glyodin			<i>IPC</i>	see Propham		
<i>Heptamul</i>	see Heptachlor			Ipconazole NEW	125225-28-7	AcCN	P-958S-CN *
Heptenophos	23560-59-0	NEAT	P-547N	Iprobenfos	26087-47-8	NEAT	P-609N
		MeOH	P-547S			MeOH	P-609S
<i>Heptox</i>	see Heptachlor			Iprodione	36734-19-7	NEAT	P-016N
<i>Herald</i>	see Danitol					Acetone	P-016S-A
<i>Herb-All</i>	see MSMA					AcCN	P-016S-CN
<i>Herkol</i>	see Dichlorvos			Iprovalicarb	140923-17-7	NEAT	P-831N
Hexaconazole	79983-71-4	NEAT	P-500N			AcCN	P-831S-CN
		MeOH	P-500S	Irgarol	28159-98-0	NEAT	P-746N
Hexaflumuron	86479-06-3	NEAT	P-697N			MeOH	P-746S
		MeOH	P-697S *	Isazophos	42509-80-8	NEAT	P-449N
Hexamethylphosphoramide	680-31-9	NEAT	P-205N			MeOH	P-449S
		MeOH	P-205S	Isobenzan	297-78-9	MeOH	P-323S
Hexazinone	51235-04-2	NEAT	P-123N	Isobenzofuranone	87-41-2	NEAT	P-1022N
		MeOH	P-123S			MeOH	P-1022S
<i>Hexylthiocarbam</i>	see Cycloate			Isocarbamid NEW	30979-48-7	AcCN	P-880S-CN
Hexythiazox	78587-05-0	NEAT	P-658N	Isocarbophos NEW	24353-61-5	NEAT	P-893N
		MeOH	P-658S			AcCN	P-893S-CN
<i>Hoe 2810</i>	see Linuron			Isodrin	465-73-6	NEAT	P-471N
<i>Hoelon</i>	see Dichlofop methyl					MeOH	P-471S
<i>Horbadox</i>	see Pendimethalin			Isufenphos	25311-71-1	NEAT	P-018N
<i>Hostathion</i>	see Triazophos					MeOH	P-018S

* V-Rated packaging surcharge applies for international shipments

► Pesticides containing a carboxyl group may autoesterify in Methanol. These standards are intended for use as a post-esterification standard for GC analysis. For other types of analysis (ex. HPLC) we suggest a non-hydroxylic solvent such as Acetonitrile.

* ColdPAK required to maintain integrity of product.



Pesticides

Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.

Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
Isufenphos-methyl	99675-03-3	MeOH	P-984S	Mancozan	see Zineb		
Isoproc carb	2631-40-5	NEAT	P-317N	Mancozeb	8018-01-7	NEAT	P-322N
		MeOH	P-317S	Mandipropamid	374726-62-2	NEAT	P-1023N
Isopropalin	33820-53-0	NEAT	P-100N			AcCN	P-1023S-CN
		MeOH	P-100S	Maneb	12427-38-2	NEAT	P-282N
2-Isopropylamino-4,6-dichloro-s-triazine		NEAT	P-635N	Manzeb	see Mancozeb		
		MeOH	P-635S	Marathon	see Imidacloprid		
2-Isopropyl-6-methyl-4-pyrimidinol		NEAT	P-631N	Marlate	see Methoxychlor		
2814-20-2		MeOH	P-631S	Matacil	see Aminocarb		
1-(4-Isopropylphenyl)-3-methylurea	34123-57-4	MeOH	P-1040S	Mataven	see Flamprop-methyl		
NEW				Mavrik	see Fluvalinate		
Isoprothiolane	50512-35-1	NEAT	P-661N	Maxforce	see Hydramethylnon		
		MeOH	P-661S	MCPA-acid ▶	94-74-6	NEAT	P-153N
Isoproturon	34123-59-6	NEAT	P-302N			MeOH	P-153S
		MeOH	P-302S			AcCN	P-153S-CN
Isopyrazam NEW	881685-58-1	AcCN	P-1159S-CN	MCPA 2-ethylhexyl ester NEW	29450-45-1	NEAT	P-1082N
Isoxaben	82558-50-7	NEAT	P-533N			MeOH	P-1082S
		MeOH	P-533S	MCPA methyl ester	2436-73-9	NEAT	P-038N
Isoxaflutole	141112-29-0	NEAT	P-832N			MeOH	P-038S
		AcCN	P-832S-CN	MCPB acid	94-81-5	NEAT	P-370N
Isoxathion NEW	18854-01-8	NEAT	P-1096N			MeOH	P-370S
		AcCN	P-1096S-CN	MCPB methyl ester	57153-18-1	NEAT	P-371N
Jodfenphos	see Iodofenphos					MeOH	P-371S
Kadethrine	58769-20-3	NEAT	P-367N	MCPB acid ▶	7085-19-0	NEAT	P-154N
		MeOH	P-367S			MeOH	P-154S
Karbutilate	4849-32-5	NEAT	P-337N			AcCN	P-154S-CN
		MeOH	P-337S	MCPB methyl ester	23844-56-6	NEAT	P-040N
Karmex	330-54-1	NEAT	P-227N			MeOH	P-040S
		MeOH	P-227S	Mecarbam	2595-54-2	NEAT	P-318N
Kelthane	115-32-2	NEAT	P-057N			MeOH	P-318S
		MeOH	P-057S	Mecoprop	see MCPB acid		
Kepone	143-50-0	NEAT	P-152N	Mecoprop, 2-ethylhexyl ester	71526-69-7	NEAT	P-502N
		MeOH	P-152S			MeOH	P-502S
Kerb	see Pronamide			Mecoprop-1-octyl ester	161922-37-8	AcCN	P-1028S-CN
3-Ketocarbocofuran	16709-30-1	Acetone	P-298S-A	Mecoprop-2-octyl ester	28473-03-2	NEAT	P-1029N
Kilprop	see MCPB acid					AcCN	P-1029S-CN
Kothar	see Oxyfluorfen			Mecoprop-p NEW	16484-77-8	NEAT	P-1053N
Kresoxim-methyl	143390-89-0	NEAT	P-740N			Acetone	P-1053S-A
		MeOH	P-740S	Mediben	see Dicamba		
Lactofen NEW	77501-63-4	NEAT	P-979N	Mefenacet	73250-68-7	NEAT	P-745N
		AcCN	P-979S-CN			MeOH	P-745S
Lannate	see Methomyl			Mefenpyr-diethyl	135590-91-9	NEAT	P-1010N
Larvadex	see Cyromazine					MeOH	P-1010S
Lasso	see Alachlor			Meltatox	see Dodemorph acetate		
Lazo	see Alachlor			Menaphace	see MCPA acid		
Lenacil	2164-08-1	NEAT	P-649N	Mepanipyrim	110235-47-7	NEAT	P-855N
		MeOH	P-649S			AcCN	P-855S-CN
Lentagran	see Pyridate			Mephosfolan	950-10-7	NEAT	P-718N
Lepton	see Leptophos					MeOH	P-718S
Leptophos	21609-90-5	NEAT	P-206N	Mepiquat chloride NEW	24307-26-4	NEAT	P-1062N
		MeOH	P-206S			MeOH	P-1062S
Lesan	see Fenaminosulf			Mepro	see MCPB acid		
Lethane 384	112-56-1	NEAT	P-506N	Meptyldinocap NEW	131-72-6	MeOH	P-1043S
		MeOH	P-506S	2-Mercaptobenzothiazole monoethanolamine salt	see Vanicide-20S		
Lindane (γ-BHC)	58-89-9	NEAT	P-059N				
		MeOH	P-059S	Mercaptodimethur	see Methiocarb		
Linuron	330-55-2	NEAT	P-022N	Mercaptophos	see Fenthion		
		MeOH	P-022S	Mercuram	see Thiram		
Liphadione	see Chlorophacinone			Merge 823	see MSMA		
Lonacol	see Zineb			Merphos	150-50-5	NEAT	P-124N
Lontrel	1702-17-6	NEAT	P-224N			MeOH	P-124S
		MeOH	P-224S	Mesosulfuron-methyl NEW	208465-21-8	NEAT	P-1044N
Lorox	see Linuron					MeOH	P-1044S
Lufenuron	103055-07-8	NEAT	P-704N	Mesotrione NEW	104206-82-8	AcCN	P-962S-CN *
		MeOH	P-704S	Metacide	see Methyl parathion		
Machete	see Butachlor			Metaflumizone NEW	139968-49-3	AcCN	P-1090S-CN *
Malaoxon	1634-78-2	NEAT	P-529N	Metalaxyl	57837-19-1	NEAT	P-120N
		MeOH	P-529S			MeOH	P-120S
Malaspray	see Malathion			Metalaxyl-M	70630-17-0	NEAT	P-874N
Malathion	121-75-5	NEAT	P-060N			MeOH	P-874S
		MeOH	P-060S	Metaldehyde ▶	9002-91-9	NEAT	P-600N
Maleic hydrazide	123-33-1	NEAT	P-380N			MeOH	P-600S
		MeOH	P-380S			AcCN	P-600S-CN

Most at Same Low Price in Neat (10 mg) or Solution (100 µg/mL) form

Most Pesticides are available in 1000 µg/mL (add -10X). Call or visit website for pricing.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001



Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
Metamitron	41394-05-2	NEAT	P-252N	Metoxuron	19937-59-8	NEAT	P-437N
		MeOH	P-252S			MeOH	P-437S
Metam-sodium	see Metam-sodium dihydrate			Metrafenone	220899-03-6	NEAT	P-1032N
Metam-sodium dihydrate	6734-80-1	NEAT	P-381N			AcCN	P-1032S-CN
		MeOH	P-381S	Metribuzin	21087-64-9	NEAT	P-089N
Metasystox R	see Oxydemeton methyl					MeOH	P-089S
Metazachlor	67129-08-2	NEAT	P-249N	Metron	see Methyl parathion		
		MeOH	P-249S	Metsulfuron-methyl	74223-64-6	NEAT	P-463N
Metconazole	125116-23-6	NEAT	P-856N			MeOH	P-463S *
		AcCN	P-856S-CN	Mevinphos	7786-34-7	NEAT	P-074N *
Methabenzthiazuron	18691-97-9	NEAT	P-563N			MeOH	P-074S
		MeOH	P-563S	Mexacarbate	315-18-4	NEAT	P-030N
Methacrifos	62610-77-9	NEAT	P-556N			MeOH	P-030S
		MeOH	P-556S	MGK-264	113-48-4	NEAT	P-082N
Methamidophos	see Monitor					MeOH	P-082S
Methfuroxam NEW	28730-17-8	AcCN	P-881S-CN *	MGK-326	136-45-8	NEAT	P-342N
Methidathion	950-37-8	NEAT	P-195N *			MeOH	P-342S
		MeOH	P-195S	Milogard	see Propazine		
Methiocarb	2032-65-7	NEAT	P-156N	MIPC	see Isoproc carb		
		MeOH	P-156S	Mirex	2385-85-5	NEAT	P-066N
Methiocarb sulfone NEW	2179-25-1	NEAT	P-570N			MeOH	P-066S
		AcCN	P-570S-CN	Mitac	see Amitraz		
Methiocarb sulfoxide NEW	2635-10-1	NEAT	P-650N	Mocap	see Ethoprop		
		MeOH	P-650S	Molinate	2212-67-1	NEAT	P-176N
Methomyl	16752-77-5	NEAT	P-032N			MeOH	P-176S
	1000 µg/mL	MeOH	P-032S	Monalide	7287-36-7	NEAT	P-737N
Methoprene	40596-69-8	MeOH	P-032S-10X			MeOH	P-737S
		NEAT	P-157N	Monceren	see Pencycuron		
		MeOH	P-157S	Monitor	10265-92-6	NEAT	P-155N
Methoprotrene	841-06-5	NEAT	P-564N			MeOH	P-155S
		MeOH	P-564S	Monocrotophos	6923-22-4	NEAT	P-112N
Methoxychlor	72-43-5	NEAT	P-064N			MeOH	P-112S
		MeOH	P-064S	Monolinuron	1746-81-2	NEAT	P-382N
o,p'-Methoxychlor	30667-99-3	MeOH	P-535S			MeOH	P-382S
		Isocetane	P-535S-TP	Monomethyltetrachloroterephthalate	887-54-7	NEAT	P-707N
p,p'-Methoxychlor-olefin	2132-70-9	MeOH	P-466S			Acetone	P-707S-A
Methoxy-DDT	see Methoxychlor			Monuron	150-68-5	NEAT	P-023N
Methoxyfenozide	161050-58-4	NEAT	P-857N			MeOH	P-023S
		AcCN	P-857S-CN	Monuron TCA	140-41-0	NEAT	P-034N
Methylamine hydrochloride	593-51-1	NEAT	P-624N			MeOH	P-034S
		MeOH	P-624S	2-Monuron		NEAT	P-633N
Methyl-3,5-dichlorobenzoate	2905-67-1	NEAT	P-247N			MeOH	P-633S
		MeOH	P-247S	Morestan	see Chinomethionate		
2-Methyl-4,6-dinitroanisole	29027-13-2	NEAT	P-611N	Moxidectin NEW	113507-06-5	AcCN	P-961S-CN *
		MeOH	P-611S	MSMA	see Bueno		
2-Methyl-4,6-dinitrophenol methyl ether				Myclobutanil	88671-89-0	NEAT	P-330N
	see 2-Methyl-4,6-dinitroanisole					MeOH	P-330S
Methyl dursban	see Chlorpyrifos-methyl ester			Nabam	142-59-6	NEAT	P-383N
Methyl-2,4-dichlorophenylacetate		NEAT	P-214N			MeOH	P-383S
	55954-23-9	MeOH	P-214S	Naled	300-76-5	NEAT	P-159N
3-Methyl-4-nitrophenol	2581-34-2	NEAT	P-509N			MeOH	P-159S
		MeOH	P-509S	1-Naphthalene acetamide	86-86-2	NEAT	P-512N
Methyl nonyl ketone	112-12-9	NEAT	P-415N			MeOH	P-512S
		MeOH	P-415S	1-Naphthol	90-15-3	NEAT	P-1007N
		AcCN	P-415S-CN			MeOH	P-1007S
Methyl paraoxon	950-35-6	NEAT	P-311N	Napropamide	15299-99-7	NEAT	P-179N
		MeOH	P-311S			MeOH	P-179S
Methyl parathion	298-00-0	NEAT	P-065N *	Naptalam	see Alanap		
		MeOH	P-065S	1-Naphthylacetic acid	86-87-3	NEAT	P-461N
Methylpentachlorophenyl sulfide	1825-19-0	NEAT	P-567N			MeOH	P-461S
		MeOH	P-567S	Navadel	see Dioxathion		
Methyl tiofanato	see Thiophanate-methyl			Neburon	555-37-3	NEAT	P-041N
Methyl trithion	953-17-3	MeOH	P-652S			MeOH	P-041S
Metiram	9006-42-2	NEAT	P-416N	Neguvon	see Trichlorfon		
Metobromuron	3060-89-7	NEAT	P-436N	Nemacur R	see Fenamiphos		
		MeOH	P-436S	Neocidol	see Diazinon		
Metolachlor	51218-45-2	NEAT	P-158N	Netrazine	see Cyromazine		
		MeOH	P-158S	Niagamite	see Aramite		
S-Metolachlor	87392-12-9	NEAT	P-1013N	Nialate	see Ethion		
		MeOH	P-1013S	Niclosamide	50-65-7	NEAT	P-160N
Metolcarb	1129-41-5	NEAT	P-494N			MeOH	P-160S
		MeOH	P-494S	Nicosulfuron	111991-09-4	NEAT	P-591N
Metosulam NEW	139528-85-1	AcCN	P-900S-CN			AcCN	P-591S-CN
				Nifos	see TEPP		

* V-Rated packaging surcharge applies for international shipments

► Pesticides containing a carboxyl group may autoesterify in Methanol. These standards are intended for use as a post-esterification standard for GC analysis. For other types of analysis (ex. HPLC) we suggest a non-hydroxylic solvent such as Acetonitrile.

* ColdPAK required to maintain integrity of product.



Pesticides

Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.

Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
Nitenpyram	120738-89-8	NEAT	P-858N	Oxycarboxin	5259-88-1	NEAT	P-391N
		AcCN	P-858S-CN			MeOH	P-391S
Nitralin	4726-14-1	NEAT	P-583N	Oxychlordane Isomer	27304-13-8	MeOH	P-331S
		MeOH	P-583S		10 µg/mL in	MeOH	P-331S-0.1X
Nitrpyrin	1929-82-4	NEAT	P-489N	Oxydemeton-methyl	301-12-2	Hexane	P-331S-H
		MeOH	P-489S	Oxyfluorfen	42874-03-3	MeOH	P-290S
4-Nitroanisole	100-17-4	NEAT	P-273N			NEAT	P-277N
		MeOH	P-273S			MeOH	P-277S
Nitrofen	1836-75-5	NEAT	P-363N	Oxythioquinox	see Chinomethionate		
		MeOH	P-363S	Paarlan	see Isopropalin		
Nitrothal-isopropyl	10552-74-6	NEAT	P-695N	Paraoxon	311-45-5	NEAT	P-453N
		MeOH	P-695S			MeOH	P-453S
Nix-Scald	see Ethoxyquin			Paraquat dichloride tetrahydrate	1910-42-5	NEAT	P-051N *
Nomersan	see TEPP					MeOH	P-051S
cis-Nonachlor	5103-73-1	NEAT	P-297N	Parathion	56-38-2	NEAT	P-070N
		MeOH	P-297S			MeOH	P-070S
trans-Nonachlor	39765-80-5	NEAT	P-184N	Paridol	see Methyl parathion		
		MeOH	P-184S	PCA	see Pyrazon		
Norflurazon	27314-13-2	NEAT	P-217N	PCNB	see Pentachloronitrobenzene		
		MeOH	P-217S	PCP methyl ether	see Pentachloroanisole		
Norflurazon-desmethyl NEW	23576-24-1	AcCN	P-1129S-CN *	PDU	see Fenuron		
Novaluron	116714-46-6	5 mg	P-966N-5MG	PEBC	see Tillam		
		MeOH	P-966S	Pebulate	see Tillam		
Noviflumuron NEW	121451-02-3	AcCN	P-967S-CN *	Penconazole	66246-88-6	NEAT	P-450N
Nuarimol	see Trimidial					MeOH	P-450S
Nucidol	see Diazinon			Pencycuron	66063-05-6	NEAT	P-358N
Nuvacron	see Monocrotophos					MeOH	P-358S
Nuvanol	see Iodofenphos			Pendimethalin	40487-42-1	NEAT	P-097N
Octachlor	see Chlordane					MeOH	P-097S
Octacide 264	see MGK 264			Penoxalin	see Pendimethalin		
Octalox	see Dieldrin			Penoxsulam NEW	219714-96-2	MeOH	P-1046S
Octamethylpyrophosphoramide	see Schradan			Pentachloroaniline	527-20-8	NEAT	P-875N
Octhilinone NEW	26530-20-1	NEAT	P-788N			AcCN	P-875S-CN
		AcCN	P-788S-CN	Pentachloroanisole	1825-21-4	NEAT	P-199N
OFF	see Deet					MeOH	P-199S
Ofanol	see Isufenphos			Pentachloronitrobenzene	82-68-8	NEAT	P-113N
Ofurace	58810-48-3	10 µg/mL	P-653S-TP-0.1X			MeOH	P-113S
		Isooctane		Pentanochlor NEW	2307-68-8	NEAT	P-1067N
Omethoate	1113-02-6	NEAT	P-121N			MeOH	P-1067S
		MeOH	P-121S	Penthioapyrad NEW	183675-82-3	AcCN	P-1131S-CN *
Omite	see Propargite			Pentoxazone NEW	110956-75-7	MeOH	P-1051S-0.1X
OMPA	see Schradan			Permethrin (cis/trans)	52645-53-1	NEAT	P-128N
Omtan	see Isobenzan					MeOH	P-128S
Option	see Fenoxaprop-ethyl			Perthane	72-56-0	NEAT	P-162N
Orbencarb	34622-58-7	NEAT	P-433N			MeOH	P-162S
		MeOH	P-433S	Peropal	see Azocyclotin		
Orbit	see Tilt			Pestox III	see Schradan		
Ordram	see Molinate			Pethoxamid NEW	106700-29-2	NEAT	P-1047N
Ornamec	see Fluazifop-p-butyl					MeOH	P-1047S
Orthene	see Acephate			Phenacide	see Toxaphene		
Orthocide	see Captan			Phenamiphos	see Fenamiphos		
Orthosulfamuron NEW	213464-77-8	Acetone	P-1045S-A	Phenmedipham	13684-63-4	NEAT	P-392N
Oryzalin	19044-88-3	NEAT	P-043N			MeOH	P-392S
		MeOH	P-043S	Phenothiazine	92-84-2	NEAT	P-579N
Outfox	see Cyprazine					MeOH	P-579S
Ovex	80-33-1	NEAT	P-425N	Phenothrin	see Sumithrin		
		MeOH	P-425S	Phenthoate	2597-03-7	NEAT	P-476N
Ovochlor	see Ovex					MeOH	P-476S
Oxabetrinil	74782-23-3	NEAT	P-995N	Phenyl mercury acetate	62-38-4	NEAT	P-393N
		MeOH	P-995S			MeOH	P-393S
Oxadiargyl	39807-15-3	NEAT	P-1031N	o-Phenylphenol	90-43-7	NEAT	P-460N
		AcCN	P-1031S-CN			MeOH	P-460S
Oxadiazon	19666-30-9	NEAT	P-236N	Phenyl valerate	20115-23-5	NEAT	P-734N
		MeOH	P-236S			MeOH	P-734S
Oxadixyl	77732-09-3	NEAT	P-560N	Phorate	298-02-2	NEAT	P-170N *
		MeOH	P-560S			MeOH	P-170S
Oxamyl	23135-22-0	NEAT	P-161N	Phorate-oxon	2600-69-3	10 µg/mL	P-1018S-T-0.1X
		MeOH	P-161S			Toluene	
Oxamyl oxime NEW	30558-43-1	AcCN	P-1138S-CN	Phorate-oxon sulfone NEW	2588-06-9	AcCN	P-1161S-CN
Oxasulfuron	144651-06-9	NEAT	P-859N	Phorate-oxon sulfoxide NEW	2588-05-8	AcCN	P-1153S-CN
		AcCN	P-859S-CN	Phorate sulfone	2588-04-7	Hexane	P-655S-H
Oxaziclomefone NEW	153197-14-9	MeOH	P-1066S				

Most at Same Low Price in Neat (10 mg) or Solution (100 µg/mL) form
Can't find a Pesticide? Search using CAS No. Index in back of the catalog.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001



Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
Phorate sulfoxide	2588-03-6	NEAT	P-732N	Prodiamine	29091-21-2	NEAT	P-739N
		MeOH	P-732S			MeOH	P-739S
Phosalone	2310-17-0	NEAT	P-163N	Profenofos	41198-08-7	NEAT	P-260N
		MeOH	P-163S			MeOH	P-260S
Phosdrin	see Mevinphos			Profluoralin	26399-36-0	NEAT	P-099N
Phosethoprop	see Ethoprop					MeOH	P-099S
Phosfolan	947-02-4	NEAT	P-234N	Prohexadione-calcium NEW	127277-53-6	NEAT	P-1068N
		MeOH	P-234S			Water	P-1068S-W
Phosmet	see Imidan			Prolate	see Imidan		
Phosmet oxon	3735-33-9	Toluene	P-733S-T	Promecarb	2631-37-0	NEAT	P-265N
Phosphamidon	13171-21-6	NEAT	P-075N			MeOH	P-265S
		MeOH	P-075S	Prometon	1610-18-0	NEAT	P-077N
Phosphothion	see Malathion					MeOH	P-077S
Phosvel	see Leptophos			Prometryne	7287-19-6	NEAT	P-078N
Phoxim	14816-18-3	NEAT	P-357N			MeOH	P-078S
		MeOH	P-357S	Pronamide	23950-58-5	NEAT	P-164N
Phthalide	see 1-Isobenzofuranone					MeOH	P-164S
Phthalthrin	see Tetramethrin			Propachlor	1918-16-7	NEAT	P-215N
Picloram	1918-02-1	NEAT	P-047N			MeOH	P-215S
		MeOH	P-047S	Propamocarb	24579-73-5	NEAT	P-312N
Picloram methyl ester	14143-55-6	NEAT	P-198N			MeOH	P-312S
		MeOH	P-198S	Propamocarb hydrochloride NEW	25606-41-1	AcCN	P-1137S-CN *
Picolinafen NEW	137641-05-5	NEAT	P-1061N	Propanil	709-98-8	NEAT	P-049N
		MeOH	P-1061S			MeOH	P-049S
4-Picoline	see 4-Aminopyridine			Propaquizafop	111479-05-1	NEAT	P-908N
Picoxystrobin	117428-22-5	NEAT	P-860N			MeOH	P-908S
		AcCN	P-860S-CN	Propargite	2312-35-8	NEAT	P-251N
Pindone	83-26-1	NEAT	P-394N			MeOH	P-251S
		MeOH	P-394S	Propazine	139-40-2	NEAT	P-079N
Pinoxaden NEW	243973-20-8	NEAT	P-1154N			MeOH	P-079S
		AcCN	P-1154S-CN	Propetamphos	31218-83-4	NEAT	P-417N
Piperalin	3478-94-2	NEAT	P-663N			MeOH	P-417S
		MeOH	P-663S	Propham	122-42-9	NEAT	P-052N
Piperonyl butoxide	51-03-6	NEAT	P-348N			MeOH	P-052S
		MeOH	P-348S	Prophos	see Ethoprop		
Piperophos	24151-93-7	NEAT	P-656N	Propiconazole	see Tilt		
Pirimicarb	23103-98-2	NEAT	P-304N	Propineb	12071-83-9	NEAT	P-608N
		MeOH	P-304S	Propoxur	see Baygon		
Pirimicarb-desmethyl NEW	30614-22-3	AcCN	P-1139S-CN	Propoxycarbazono-sodium	181274-15-7	NEAT	P-1014N
Pirimiphos-ethyl	23505-41-1	NEAT	P-328N		50 µg/mL in	Water	P-1014S-W-0.5X
		MeOH	P-328S	Propylenethiourea (PTU)	2055-46-1	NEAT	P-861N
Pirimiphos-methyl	29232-93-7	NEAT	P-305N			AcCN	P-861S-CN
		MeOH	P-305S	Propyzamide	see Pronamide		
Pirimor	see Pirimicarb			Proquinazid NEW	189278-12-4	AcCN	P-1156S-CN
Pival	see Pindone			Prosulfocarb	52888-80-9	NEAT	P-742N
PMA	see Phenyl mercury acetate					MeOH	P-742S
Polytrin	see Cypermethrin			Prosulfuron	94125-34-5	NEAT	P-834N
Potassium dimethyl dithiocarbamate	128-03-0	AcCN	P-714S-CN *			AcCN	P-834S-CN
Potassium n-hydroxymethyl-n-methyl dithiocarbamate	51026-28-9	AcCN	P-715S-CN *	Protector 3L	see Busan		
				Protex	see Rotenone		
Prallethrin	23031-36-9	MeOH	P-667S	Prothioconazole NEW	178928-70-6	AcCN	P-965S-CN
Pramitol	see Prometon			Prothiophos	see Tokuthion		
Prebane	886-50-0	NEAT	P-119N	Prowl	see Pendimethalin		
		MeOH	P-119S	Proximpam NEW	2828-42-4	NEAT	P-1081N
Preaglone	see Paraquat CL					MeOH	P-1081S
Prefar	see Bensulide			Pursuit	see Imazethapyr		
Premerg	see Trichlorfon			Pymetrozin	123312-89-0	NEAT	P-835N
Pretilachlor	51218-49-6	NEAT	P-485N			AcCN	P-835S-CN
		MeOH	P-485S	Pynamin	see Allethrin		
Primatol P	see Propazine			Pyracarbolid NEW	24691-76-7	AcCN	P-792S-CN *
Primatol Q	see Prometryne			Pyraclofos	77458-01-6	MeOH	P-716S
Primatol S	see Simazine			Pyraclostrobin	175013-18-0	NEAT	P-863N
Primaze	see Prometryne					AcCN	P-863S-CN
Primicid	see Pirimiphos-ethyl			Pyraflufen-ethyl	129630-19-9	NEAT	P-1015N
Primisulfuron-methyl	86209-51-0	NEAT	P-833N			Acetone	P-1015S-A
		AcCN	P-833S-CN	Pyrasulfotole NEW	365400-11-9	AcCN	P-1144S-CN
Princep	see Simazine			Pyrazon	1698-60-8	NEAT	P-395N
Probenazole	27605-76-1	NEAT	P-710N			MeOH	P-395S
		Acetone	P-710S-A	Pyrazophos	13457-18-6	NEAT	P-359N
Prochloraz	67747-09-5	NEAT	P-549N			MeOH	P-359S
		MeOH	P-549S	Pyrazoxyfen	71561-11-0	NEAT	P-618N
Procymidone	32809-16-8	NEAT	P-430N			MeOH	P-618S
		MeOH	P-430S	Pyrethrins	8003-34-7	NEAT	P-187N
						MeOH	P-187S

► Pesticides containing a carboxyl group may autoesterify in Methanol. These standards are intended for use as a post-esterification standard for GC analysis. For other types of analysis (ex. HPLC) we suggest a non-hydroxylic solvent such as Acetonitrile.

* ColdPAK required to maintain integrity of product.



Pesticides

Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.

Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
<i>Pyrethrum</i>	see Pyrethrins			Schradan	152-16-9	NEAT	P-418N
Pyributicarb	88678-67-5	MeOH	P-987S			MeOH	P-418S
Pyridaben	96489-71-3	NEAT	P-693N	Sebuthylazine	7286-69-3	NEAT	P-432N
		MeOH	P-693S			MeOH	P-432S
Pyridalyl	179101-81-6	NEAT	P-990N	Secbumeton	26259-45-0	NEAT	P-165N
		MeOH	P-990S			MeOH	P-165S
Pyridaphenthion	119-12-0	MeOH	P-610S	<i>Select</i>	see Clethodim		
Pyridate	55512-33-9	NEAT	P-404N	<i>Sencor</i>	see Metribuzin		
		MeOH	P-404S	Sethoxydim	74051-80-2	NEAT	P-306N
Pyrifluquinazon NEW	337458-27-2	AcCN	P-1093S-CN			AcCN	P-306S-CN *
Pyrimethanil	53112-28-0	NEAT	P-723N	<i>Sevin</i>	see Carbaryl		
		MeOH	P-723S	Siduron	1982-49-6	NEAT	P-063N
Pyrimidifen	105779-78-0	MeOH	P-989S			MeOH	P-063S
<i>Pyriminil</i>	see Vacor			Silafluofen	105024-66-6	NEAT	P-717N
(E)-Pyriminobac-methyl	147411-69-6	MeOH	P-1030S-0.5X			MeOH	P-717S
	50 µg/mL			<i>Silmurix</i>	see Schradan		
Pyriphenox	88283-41-4	MeOH	P-668S	Silvex	93-72-1	NEAT	P-084N
Pyriproxyfen	95737-68-1	NEAT	P-795N			MeOH	P-084S
		AcCN	P-795S-CN			AcCN	P-084S-CN
<i>Pyron</i>	see Pyridate			Silvex 2-ethylhexyl ester	53404-76-5	NEAT	P-728N
Pyroquilon	57369-32-1	NEAT	P-696N			MeOH	P-728S
		MeOH	P-696S	Silvex methyl ester	4841-20-7	NEAT	P-115N
Pyroxsulam NEW	422556-08-9	NEAT	P-1060N			MeOH	P-115S
		MeOH	P-1060S	Simazine	122-34-9	NEAT	P-085N
<i>Queletox</i>	see Fenthion					MeOH	P-085S
Quinalphos	13593-03-8	NEAT	P-462N	Simeton	673-04-1	NEAT	P-501N
		MeOH	P-462S			MeOH	P-501S
Quinclorac	84087-01-4	NEAT	P-692N	Simetryn	1014-70-6	NEAT	P-166N
		MeOH	P-692S			MeOH	P-166S
		AcCN	P-692S-CN	<i>Sinbar</i>	see Terbacil		
Quinmerac	90717-03-6	NEAT	P-836N	<i>Siperin</i>	see Cypermethrin		
		AcCN	P-836S-CN	<i>Sipscasan</i>	see Thiophanate-methyl		
Quinoclamine	2797-51-5	NEAT	P-985N	Sodium diethyldithiocarbamate trihydrate	20624-25-3	NEAT	P-505N
		MeOH	P-985S			H ₂ O	P-505S-W
Quinoxifen	124495-18-7	5 mg	P-882N-5MG	<i>Solfac</i>	see Cyfluthrin		
		MeOH	P-882S	<i>Sonalan</i>	see Ethalfuralin		
<i>Quintozene</i>	see Pentachloronitrobenzene			<i>Sonar</i>	see Fluridone		
Quizalofop ethyl	76578-14-8	NEAT	P-293N	<i>Spike</i>	see Tebuthiuron		
		AcCN	P-293S-CN	Spinetoram NEW	187166-40-1 / mix of isomers J & L	AcCN	P-1083S-CN
<i>Racumin</i>	see Coumatetralyl				187166-15-0		
<i>Radapon</i>	see Dalapon acid			Spirodiclofen	148477-71-8	NEAT	P-938N
<i>Ramrod</i>	see Propachlor					MeOH	P-938S
<i>Reglone</i>	see Diquat dibromide			Spiromesifen	283594-90-1	AcCN	P-960S-CN
Resmethrin	10453-86-8	NEAT	P-325N			NEAT	P-1077N
		MeOH	P-325S	Spirotetramat NEW	203313-25-1	AcCN	P-1077S-CN
<i>Rezifilm</i>	see Thiram					AcCN	P-1077S-CN
Rimsulfuron	122931-48-0	NEAT	P-837N	Spinosad	168316-95-8	NEAT	P-864N
		AcCN	P-837S-CN *			AcCN	P-864S-CN
<i>Rogor</i>	see Dimethoate			Spiroxamine	118134-30-8	NEAT	P-869N
<i>Rogue</i>	see Propanil					AcCN	P-869S-CN
<i>Ronilan</i>	see Vinclozolin			<i>Stam F-34</i>	see Propanil		
Ronnel	299-84-3	NEAT	P-080N	<i>Stirafos</i>	see Tetrachlorvinphos		
		MeOH	P-080S	<i>Stomp</i>	see Pendimethalin		
<i>Ronstar</i>	see Oxadiazon			Strobane	8001-50-1	NEAT	P-339N
<i>Rospin</i>	see Chloropropylate					MeOH	P-339S
Rotenone	83-79-4	NEAT	P-056N	<i>Suffix</i>	see Benzoylprop ethyl		
		MeOH	P-056S *	Sulcontrione	99105-77-8	NEAT	P-951N
<i>Roundup</i>	see Glyphosate					MeOH	P-951S
<i>Rovral</i>	see Iprodione			Sulfallate	95-06-7	NEAT	P-327N
<i>Roxion</i>	see Dimethoate					MeOH	P-327S
<i>Rubigan</i>	see Bloc			Sulfentrazone NEW	122836-35-5	NEAT	P-798N
<i>Ruelene</i>	see Crufomate					AcCN	P-798S-CN
S421	127-90-2	NEAT	P-749N	Sulfometuron methyl ester	74222-97-2	NEAT	P-336N
		MeOH	P-749S			MeOH	P-681S
<i>SADH</i>	see Alar			Sulfosulfuron	141776-32-1	10 µg/mL AcCN	P-865S-CN-0.1X
Saflufenacil NEW	372137-35-4	NEAT	P-1078N			NEAT	P-167N
		MeOH	P-1078S	Sulfotep	3689-24-5	MeOH	P-167S
<i>Safrofin</i>	see Propetamphos			<i>Sulfox-cide</i>	see Sulfoxide		
<i>Sancap</i>	see Dipropetryn			Sulfoxide	120-62-7	NEAT	P-396N
<i>Sanmarton</i>	see Fenvalerate					MeOH	P-396S
<i>Scepter</i>	see Imazaquin						

Most at Same Low Price in Neat (10 mg) or Solution (100 µg/mL) form

Most Pesticides are available in 1000 µg/mL (add -10X). Call or visit website for pricing.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001



Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.

Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
<i>Sulfoxyl</i>	see Sulfoxide			Terbufos	13071-79-9	NEAT	P-208N
<i>Sulprofos</i>	see Bolstar					MeOH	P-208S
<i>Sumicidin</i>	see Fenvalerate			Terbufos sulfone	56070-16-7	MeOH	P-729S
<i>Sumifty</i>	see Fenvalerate			Terbufos sulfoxide	10548-10-4	NEAT	P-730N
<i>Sumipower</i>	see Fenvalerate					MeOH	P-730S
Sumithrin	26002-80-2	NEAT	P-050N	Terbumeton	33693-04-8	NEAT	P-504N
		MeOH	P-050S			MeOH	P-504S
<i>Sumitol</i>	see Secbumeton			Terbuthylazine	5915-41-3	NEAT	P-169N
<i>Summit</i>	see Triadimenol					MeOH	P-169S
<i>Super X</i>	see Terrazole			Terbuthylazine desethyl	30125-63-4	NEAT	P-613N
<i>Supracide</i>	see Methidathion					MeOH	P-613S
<i>Surcopur</i>	see Propanil			Terbutol	1918-11-2	NEAT	P-464N
<i>Surflan</i>	see Oryzalin					MeOH	P-464S
<i>Sutan</i>	see Butylate			<i>Terbutryn</i>	see Prebane		
<i>Swebate</i>	see Abate			<i>Terpene polychlorinates</i>	see Strobane		
Sweep	1918-18-9	NEAT	P-061N	<i>Terraclor</i>	see Pentachloronitrobenzene		
		MeOH	P-061S	<i>Terracur P</i>	see Dasanit		
<i>Systhane</i>	see Myclobutanil			Terrazole	2593-15-9	NEAT	P-190N
<i>Systox</i>	see Demeton					MeOH	P-190S
2,4,5-T acid ▶	93-76-5	NEAT	P-168N	<i>Terre-Sytam</i>	see Dimefox		
		MeOH	P-168S	<i>Tersan</i>	see Thiram		
		AcCN	P-168S-CN	<i>Tersan SP</i>	see Chloroneb		
2,4,5-T butoxyethyl ester	2545-59-7	NEAT	P-441N	1,2,3,4-Tetrachlorobenzene	634-66-2	NEAT	P-999N
		AcCN	P-441S-CN			MeOH	P-999S
2,4,5-T n-butyl ester	93-79-8	NEAT	P-440N	1,2,3,5-Tetrachlorobenzene	634-90-2	NEAT	P-1001N
		AcCN	P-440S-CN			Isocotane	P-1001S-TP
2,4,5-T methyl ester	1928-37-6	NEAT	P-067N	1,2,4,5-Tetrachlorobenzene	95-94-3	NEAT	P-1003N
		MeOH	P-067S			MeOH	P-1003S
2,4,6-T ▶	575-89-3	NEAT	P-523N	1,2,3,4-Tetrachloro-5-nitrobenzene	879-39-0	NEAT	P-1000N
		MeOH	P-523S			MeOH	P-1000S
		AcCN	P-523S-CN	2,3,5,6-Tetrachloronitrobenzene	117-18-0	NEAT	P-467N
<i>Talstar</i>	see Bifenthrin					MeOH	P-467S
<i>Tame</i>	see Danitol			Tetrachlorvinphos	961-11-5	NEAT	P-125N
<i>Tamaron</i>	see Monitor					MeOH	P-125S
<i>Tamogan</i>	see Bromadiolone			Tetraconazole	112281-77-3	NEAT	P-721N
<i>Target</i>	see MSMA					MeOH	P-721S
<i>TCA</i>	see Trichloroacetic acid			Tetradifon	116-29-0	NEAT	P-261N
<i>TCMTB</i>	see Busan					MeOH	P-261S
<i>TCNB</i>	see Tecnazene			cis-d4-Tetrahydrophthalimide	1469-48-3	MeOH	P-116S
Tebuconazol	107534-96-3	NEAT	P-451N	1,2,3,6-Tetrahydrophthalimide	85-40-5	NEAT	P-621N
		MeOH	P-451S			MeOH	P-621S
Tebufenozide	112410-23-8	NEAT	P-726N	Tetramethrin	7696-12-0	NEAT	P-406N
		MeOH	P-726S			MeOH	P-406S
Tebufenpyrad	119168-77-3	NEAT	P-877N	Tetrasul	2227-13-6	NEAT	P-552N
		MeOH	P-877S			MeOH	P-552S
Tebupirimfos	96182-53-5	NEAT	P-727N	<i>Tetron</i>	see TEPP		
		MeOH	P-727S	Thiabendazole	148-79-8	NEAT	P-068N
Tebutam	35256-85-0	MeOH	P-879S			MeOH	P-068S
Tebuthiuron	34014-18-1	NEAT	P-188N	Thiacloprid	111988-49-9	NEAT	P-838N
		MeOH	P-188S			AcCN	P-838S-CN
<i>Tecto</i>	see Thiabendazole			Thiamethoxam	153719-23-4	NEAT	P-866N
<i>Tecnazene</i>	see 2,3,5,6-Tetrachloronitrobenzene					AcCN	P-866S-CN
<i>Tedion</i>	see Tetradifon			Thiazopyr NEW	117718-60-2	NEAT	P-808N
Teflubenzuron	83121-18-0	NEAT	P-452N			MeOH	P-808S
		MeOH	P-452S	Thidiazuron	51707-55-2	NEAT	P-369N
Tefluthrin	79538-32-2	MeOH	P-568S *			MeOH	P-369S
<i>Telodrin</i>	see Isobenzan			Thifensulfuron methyl	79277-27-3	NEAT	P-468N
Tembotrione NEW	335104-84-2	NEAT	P-1109N			MeOH	P-468S
		AcCN	P-1109S-CN	Thifluzamide NEW	130000-40-7	NEAT	P-1055N
<i>Temephos</i>	see Abate					MeOH	P-1055S
<i>Temik</i>	see Aldicarb			<i>Thimet</i>	see Phorate		
<i>Temus</i>	see Bromadiolone			Thiobencarb	28249-77-6	NEAT	P-180N
<i>Tenoran</i>	see Chloroxuron					MeOH	P-180S
TEPP	107-49-3	NEAT	P-207N	Thiocyclam hydrogen oxalate	31895-22-4	MeOH	P-688S
Terbacil	5902-51-2	NEAT	P-096N				
		MeOH	P-096S				

Most at Same Low Price in Neat (10 mg) or Solution (100 µg/mL) form
Can't find a Pesticide? Search using CAS No. Index in back of the catalog.

▶ Pesticides containing a carboxyl group may autoesterify in Methanol. These standards are intended for use as a post-esterification standard for GC analysis. For other types of analysis (ex. HPLC) we suggest a non-hydroxylic solvent such as Acetonitrile.

* ColdPAK required to maintain integrity of product.

For Pesticide Kits and Mixtures
See end of Pesticide section



Pesticides

Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.

Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
<i>Thiodan I</i>	see Endosulfan I			1,2,3-Trichlorobenzene	87-61-6	NEAT	P-1002N
<i>Thiodan II</i>	see Endosulfan II					Isooctane	P-1002S-TP
Thiodicarb	59669-26-0	NEAT	P-477N	1,2,4-Trichlorobenzene	120-82-1	NEAT	P-1004N
		MeOH	P-477S			MeOH	P-1004S
4,4'-Thiodiphenol	2664-63-3	NEAT	P-117N	2,3,5-Trichlorobenzoic acid	50-73-7	NEAT	P-508N
		MeOH	P-117S			MeOH	P-508S
Thiofanox	39196-18-4	NEAT	P-266N	Trichloronate	327-98-0	NEAT	P-127N
		MeOH	P-266S			MeOH	P-127S
Thiofanox sulfone		AcCN	P-839S-CN-0.1X	2,4,6-Trichlorophenol	88-06-2	NEAT	P-1006N
Thiofanox sulfoxide	39184-27-5	NEAT	P-702N			MeOH	P-1006S
		MeOH	P-702S	3,5,6-Trichloro-2-pyridinol	6515-38-4	NEAT	P-626N
Thiometon	640-15-3	NEAT	P-486N			MeOH	P-626S
		MeOH	P-486S	<i>Trichloropyrphos</i>	see Dursban		
Thionazin	297-97-2	MeOH	P-171S	Triclopyr	55335-06-3	NEAT	P-289N
Thiophanate	23564-06-9	NEAT	P-321N			MeOH	P-289S
		MeOH	P-321S			AcCN	P-289S-CN
		AcCN	P-321S-CN	Triclopyr-2-butoxy ethyl ester	64700-56-7	NEAT	P-703N
Thiophanate-methyl	23564-05-8	NEAT	P-349N			AcCN	P-703S-CN
		MeOH	P-349S	Triclopyr methyl ester		MeOH	P-291S
<i>Thiophos</i>	see Parathion			Tricresyl phosphate	1330-78-5	NEAT	P-209N
Thiram	137-26-8	NEAT	P-118N			MeOH	P-209S
		MeOH	P-118S	Tricyclazole	41814-78-2	NEAT	P-090N
<i>Tiguvon</i>	see Fenthion					MeOH	P-090S
Tillam	1114-71-2	NEAT	P-105N	Tridemorph	24602-86-6	NEAT	P-307N
		MeOH	P-105S			MeOH	P-307S
Tilt	60207-90-1	NEAT	P-280N	Trietazine	1912-26-1	NEAT	P-492N
		MeOH	P-280S			MeOH	P-492S
<i>Tomadorane</i>	see 4-CPA			Triethylphosphate	78-40-0	NEAT	P-335N
Tobaz	see Thiabendazole					MeOH	P-335S
Tokuthion	34643-46-4	NEAT	P-126N	o,o,o-Triethylphosphorothioate	126-68-1	NEAT	P-172N
		MeOH	P-126S			MeOH	P-172S
<i>Tolban</i>	see Profluralin			<i>Trifene</i>	see Fenatrol		
Tolclofos-methyl	57018-04-9	NEAT	P-557N	Trifenmorph	1420-06-0	NEAT	P-300N
		MeOH	P-557S			MeOH	P-300S
Tolyfluanide	731-27-1	NEAT	P-553N	Trifloxystrobin	141517-21-7	NEAT	P-867N
		MeOH	P-553S			AcCN	P-867S-CN
<i>Torak</i>	see Dialifos			Triflumizole	68694-11-1	AcCN	P-479S-CN
<i>Tordon</i>	see Picloram			Triflumuron	64628-44-0	NEAT	P-689N
Toxaphene (Tech)	8001-35-2	NEAT	P-093N			MeOH	P-689S
		MeOH	P-093S	Trifluralin	1582-09-8	NEAT	P-197N
2,4,5-TP	see Silvex					MeOH	P-197S
2,4,5-TP methyl ester	see Silvex methyl ester			Triflusaluron-methyl	126535-15-7	NEAT	P-840N
Tralkoxydim	87820-88-0	NEAT	P-405N			AcCN	P-840S-CN
		MeOH	P-405S	Triforine	26644-46-2	NEAT	P-308N
Tralomethrin	66841-25-6	NEAT	P-478N			MeOH	P-308S
		MeOH	P-478S	2,3,5-Triiodobenzoic acid	88-82-4	NEAT	P-507N
Transfluthrin	118712-89-3	NEAT	P-743N			MeOH	P-507S
		MeOH	P-743S			AcCN	P-507S-CN
<i>Treflan</i>	see Trifluralin			2,3,5-Trimethacarb	2655-15-4	NEAT	P-515N
Triadimefon	43121-43-3	NEAT	P-069N			MeOH	P-515S
		MeOH	P-069S	3,4,5-Trimethacarb	2686-99-9	NEAT	P-516N
Triadimenol	55219-65-3	NEAT	P-361N			MeOH	P-516S
		MeOH	P-361S	Trimethyl phosphate	512-56-1	NEAT	P-210N
Triallate	2303-17-5	NEAT	P-268N			MeOH	P-210S
		MeOH	P-268S	Trimethylsulfonium iodide	2181-42-2	NEAT	P-1016N
Triasulfuron	82097-50-5	NEAT	P-592N			MeOH	P-1016S
		MeOH	P-592S	Trimidal	63284-71-9	NEAT	P-422N
1,2,4-Triazole	288-88-0	NEAT	P-627N			MeOH	P-422S
		MeOH	P-627S	Trinexapac-ethyl	95266-40-3	NEAT	P-1034N
Triazophos	24017-47-8	NEAT	P-334N			MeOH	P-1034S
		MeOH	P-334S	Triphenylphosphate	115-86-6	NEAT	P-192N
Tribenuron-methyl	101200-48-0	NEAT	P-666N			MeOH	P-192S
		MeOH	P-666S	Triphenyltin chloride	639-58-7	NEAT	P-526N
<i>Tribufos</i>	see DEF					MeOH	P-526S
<i>Tributylphosphorotrithioite</i>	see Merphos			<i>Trithion</i>	see Carbophenothion		
bis(Tributyltin)oxide	56-35-9	NEAT	P-455N	Triticonazole	131983-72-7	10 µg/mL	P-868S-TP-0.1X
		MeOH	P-455S			Isooctane	
Trichlorfon	52-68-6	NEAT	P-044N	<i>Trucidor</i>	see Vamidthion		
		MeOH	P-044S	<i>Tugon</i>	see Trichlorfon		
Trichloroacetic acid	76-03-9	NEAT	P-459N	<i>Tupersan</i>	see Siduron		
		MeOH	P-459S	<i>Uden</i>	see Baygon		
		AcCN	P-459S-CN				

Most at Same Low Price in Neat (10 mg) or Solution (100 µg/mL) form

Most Pesticides are available in 1000 µg/mL (add -10X). Call or visit website for pricing.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001



Neats at 10 mg. Solutions at 100 µg/mL in 1 mL, except as noted.

Pesticide Standards

Compound	Synonym / CAS No.	Matrix	Cat. No.	Compound	Synonym / CAS No.	Matrix	Cat. No.
Uniconazole NEW	83657-22-1	AcCN	P-1092S-CN *	Vinclozolin	50471-44-8	NEAT	P-122N
<i>Urab</i>	see Fenuron-TCA					MeOH	P-122S
<i>Urox</i>	see Monuron TCA			<i>Warbex</i>	see Famphur		
<i>Ustilan</i>	see Ethidimuron			Warfarin	81-81-2	NEAT	P-076N
Vacor	53558-25-1	NEAT	P-240N			MeOH	P-076S
		MeOH	P-240S	<i>Waylay</i>	see Napropamide		
Vamidothion	2275-23-2	NEAT	P-350N	<i>Weedol</i>	see Paraquat CL		
		MeOH	P-350S *	<i>Weedone</i>	see 2,4,5-T acid		
<i>Vamidoate</i>	see Vamidothion			XMC NEW	2655-14-3	NEAT	P-1085N
<i>Vancide 89</i>	see Captan					MeOH	P-1085S
<i>Vandyke 264</i>	see MGK 264			<i>Zectran</i>	see Mexacarbate		
Vanicide-20S		NEAT	P-073N	<i>Zerlate</i>	see Ziram		
		MeOH	P-073S	Zinc phosphide	1314-84-7	NEAT	P-527N
<i>Vapona</i>	see Dichlorvos			Zineb	12122-67-7	NEAT	P-098N
<i>Vapotone</i>	see TEPP			<i>Zinophos</i>	see Thionazin		
<i>Vegadex</i>	see Sulfallate			Ziram	137-30-4	NEAT	P-324N
<i>Velpar</i>	see Hexazinone					MeOH	P-324S
<i>Vernam</i>	see Vernolate			<i>Zolone</i>	see Phosalone		
Vernolate	1929-77-7	NEAT	P-111N	Zoxamide NEW	156052-68-5	AcCN	P-970S-CN *
		MeOH	P-111S				

* ColdPAK required to maintain integrity of product.



EXACT WEIGHT for Neat Pesticides

Listed Catalog neat products are overfilled approximately 10%, however, pesticides can be provided with **EXACT WEIGHT**. Specify EXACT WEIGHT by ordering **X-WT** and the exact weight is noted on the product label. There is an additional charge for this service. Rinse the pesticide out of the vial with the appropriate amount of solvent to get a weight/volume standard and calculate the concentration.

Same Low Price in Neat (10 mg) or Solution (100 µg/mL) form

**Most Pesticides are available in 1000 µg/mL (add -10X).
Call or visit website for pricing.**



Pesticides and Herbicides

Kits & Mixtures

Pesticide Kits and Mixtures

Neat Pesticide Kit

Z-004-SET *

set of 20 x 10 mg

Aldrin (01)	Dieldrin (11)
α -BHC (02)	Heptachlor (12)
β -BHC (03)	Heptachlor epoxide (Isomer B) (13)
δ -BHC (04)	Lindane (γ -BHC) (14)
o,p'-DDD (05)	Malathion (15)
p,p'-DDD (06)	Methoxychlor (16)
o,p'-DDE (07)	Mirex (17)
p,p'-DDE (08)	Parathion (18)
o,p'-DDT (09)	Carbaryl (19)
p,p'-DDT (10)	Toxaphene (20)

Pesticide (Solid Waste) Kit

Z-017-SET

set of 6 x 10 mg

2,4-Dichlorophenoxyacetic acid (2,4-D acid)	Methoxychlor
Endrin	Silvex
Lindane	Toxaphene

Pesticide Mixture for Evaluating GC Columns

M-100

At stated conc. in Isooctane

1 x 1 mL

13 comps.

Aldrin (0.050 μ g/mL)	p,p'-DDT (0.260 μ g/mL)
α -BHC (0.025 μ g/mL)	Dieldrin (0.120 μ g/mL)
β -BHC (0.100 μ g/mL)	Endrin (0.200 μ g/mL)
o,p'-DDD (0.200 μ g/mL)	Heptachlor (0.025 μ g/mL)
p,p'-DDD (0.190 μ g/mL)	Heptachlor epoxide (0.080 μ g/mL)
p,p'-DDE (0.100 μ g/mL)	(Isomer B)
o,p'-DDT (0.225 μ g/mL)	Lindane (γ -BHC) (0.025 μ g/mL)

Technical Note

Designed for evaluating the ability of a column to separate pesticides and their degradation products.

Pesticides in Solutions (Individual and Kits)

Compound (in Isooctane)	Conc.	Cat. No.
Aldrin	200 ng/ μ L	P-002S-1
	2 ng/ μ L	P-002S-2
Chlordane	200 ng/ μ L	P-017S-1
	2 ng/ μ L	P-017S-2
2,4-D methyl ester	200 ng/ μ L	P-021S-1
	2 ng/ μ L	P-021S-2
p,p'-DDE	200 ng/ μ L	P-027S-1
	2 ng/ μ L	P-027S-2
p,p'-DDT	200 ng/ μ L	P-029S-1
	2 ng/ μ L	P-029S-2
Dieldrin	200 ng/ μ L	P-037S-1
	2 ng/ μ L	P-037S-2
Endrin	200 ng/ μ L	P-045S-1
	2 ng/ μ L	P-045S-2
Heptachlor	200 ng/ μ L	P-053S-1
	2 ng/ μ L	P-053S-2
Lindane	200 ng/ μ L	P-059S-1
	2 ng/ μ L	P-059S-2
Methoxychlor	200 ng/ μ L	P-064S-1
	2 ng/ μ L	P-064S-2
Silvex methyl ester	200 ng/ μ L	P-115S-1
Toxaphene	200 ng/ μ L	P-093S-1

Set of above 21 pesticides (21 x 1 mL)

Z-023-SET

At stated concentrations

Technical Note

Convenient concentrations in isooctane for use with different GC detectors. The concentrated solutions are suited for FID & TC detectors. The diluted solutions are suited for EC detectors.

* V-Rated packaging surcharge applies for international shipments

Herbicide Kit and Mixtures

Herbicide Kit

Z-031-SET

0.1 mg/mL in MeOH

set of 15 x 1 mL

Individual Standards

Atrazine (01)	Prometryn (09)
Dicamba (02)	Prometone (10)
Benfluralin (03)	Propanil (11)
Bentazon (04) *	Propazine (12)
Dacthal (05)	Simazine (13)
Dichlobenil (06)	Tebuthiuron (14)
Diuron (07)	Trifluralin (15)
Metolachlor (08)	

* in Acetone

Herbicide Mix #1

M-HERB-1

0.1 mg/mL each in EtOAc

1 x 1 mL

13 comps.

Atrazine	Oxyfluorfen
Bromacil	Sencor
Cycloate	Sutan
Eptam	Terbacil
Isopropalin	Tillam
Hexazinone	Trifluralin
Molinate	

Herbicide Mix #2

M-HERB-2

0.1 mg/mL each in EtOAc

1 x 1 mL

9 comps.

Benfluralin	Prowl
Metolachlor	Simazine
Oxadiazon	Tolban
Propachlor	Vernam
Propazine	

Pesticides

Triazines & Metabolites, Phenylureas



Neats at 10 mg. Solutions at 100 µg/mL in MeOH, except -MC (in Methyl cellosolve)

Triazines and Metabolites

Compound	CAS No.	Neat Cat. No.	10 mg	Solution Cat. No.	1 mL
2,4-bis(Ethylamino)-6-diethylamino-s-triazine		P-536N		P-536S-MC	
2-Chloro-4-ethylamino-6-propylamino-s-triazine	90952-64-0	P-537N		P-537S-MC	
2,4-Dichloro-6-ethylamino-s-triazine		P-538N		P-538S-MC	
2-Chloro-4-ethylamino-6-methylethylamino-s-triazine		P-539N		P-539S-MC	
2-Chloro-4-methylamino-6-sec-butylamino-s-triazine		P-540N		P-540S-MC	
2-Chloro-4-methylamino-6-diethylamino-s-triazine		P-541N		P-541S-MC	
3-(2,3-Dichlorophenyl)-1,1-dimethylurea	10290-37-6	P-632N		P-632S	
Atrazine-desethyl-2-hydroxy (4-Amino-2-hydroxy-6-isopropylamino-s-triazine)	19988-24-0	-----	----	P-544S-MC	
Desethyl atrazine	6190-65-4	P-343N		P-343S	
Atrazine-desisopropyl	1007-28-9	P-345N		P-345S	
Atrazine-desisopropyl-2-hydroxy	7313-54-4	P-344N		P-344S-MC	
Atrazine	1912-24-9	P-005N		P-005S	
Ametryn	834-12-8	P-003N		P-003S	
Cyanazine	21725-46-2	P-175N		P-175S	
Gesatamine	1610-17-9	P-189N		P-189S	
2-Hydroxyatrazine	2163-68-0	-----	----	P-326S-MC	
Imazethapyr	81335-77-5	-----	----	P-285S	
2-Isopropylamino-4,6-dichloro-s-triazine		P-635N		P-635S	
2-Monuron		P-633N		P-633S	
Prometryne	7287-19-6	P-078N		P-078S	
Propazine	139-40-2	P-079N		P-079S	
Prometon	1610-18-0	P-077N		P-077S	
Sebuthylazin	7286-69-3	P-432N		P-432S	
Simazine	122-34-9	P-085N		P-085S	
Terbutylazine	5915-41-3	P-169N		P-169S	

Phenylurea Pesticide Mixtures

Phenylurea Pesticide Mixture

PES-PU-001 1 x 1 mL
PES-PU-001-PAK **SAVE** 5 x 1 mL
200 µg/mL each in AcCN:Acetone 8 comps.

Diflubenzuron Propanil
 Diuron Siduron
 Fluometuron Tebuthiuron
 Linuron Thidiazuron

Phenylurea Surrogate Mixture

PES-PU-SS 1 x 1 mL
PES-PU-SS-PAK **SAVE** 5 x 1 mL
500 µg/mL each in MeOH:AcCN 2 comps.

Carbazole Monuron



Honeybee Colony Collapse Disorder (CCD)

Neonicotinoids and Fipronils (CCD) UPDATE

On-going research into honeybee colony collapse disorder (CCD) has revealed that this group of pesticides may be a contributing factor which, may be solely responsible or working synergistically contributing to honeybee decline. Included in this group are the **Neonicotinoid pesticides**. **Fipronil** and **Fipronil metabolites** also have been suspected as possible causative agents.



Neonicotinoids

Compound	CAS	NEAT Cat. No.	Unit	SOLUTION Cat. No.	100 µg/mL Solvent	Unit
Acetamiprid	135410-20-7	P-820N	10 mg	P-820S-CN	AcCN	1 mL
6-Chloropyridine-3-carboxylic acid NEW	5326-23-8	P-1267N	10 mg	P-1267S	MeOH	1 mL
Clothianidin	210880-92-5	P-947N	10 mg	P-947S	MeOH	1 mL
n-Desmethylthiamethoxam NEW	171103-04-1	-----	-----	P-1266S	MeOH	1 mL
Dinotefuran	165252-70-0	-----	-----	P-986S-CN	AcCN	1 mL
Furathiocarb	65907-30-4	P-569N	10 mg	P-569S	MeOH	1 mL
6-Hydroxypyridine-3-carboxylic acid NEW	5006-66-6	P-1226N	10 mg	P-1226S	MeOH	1 mL
Imidacloprid	138261-41-3	P-596N	10 mg	P-596S	MeOH	1 mL
2-Imidazolidone NEW	120-93-4	P-1224N	10 mg	P-1224S	MeOH	1 mL
Nitenpyram	120738-89-8	P-858N	10 mg	P-858S-CN	AcCN	1 mL
Sulfoxaflor	946578-00-3	-----	-----	P-1133S	MeOH	1 mL
Thiacloprid	111988-49-9	P-838N	10 mg	P-838S-CN	AcCN	1 mL
Thiacloprid-amide NEW	676228-91-4	P-1223N	10 mg	P-1223S	MeOH	1 mL
Thiamethoxam	153719-23-4	P-866N	10 mg	P-866S-CN	AcCN	1 mL

Fipronils

Fipronil	120068-37-3	P-738N	10 mg	P-738S * P-738S-A *	MeOH Acetone	1 mL 1 mL
Fipronil desulfinyl	205650-65-3	-----	-----	P-782S-A *	Acetone	1 mL
Fipronil sulfide	120067-83-6	P-781N-5MG	5 mg	P-781S-A *	Acetone	1 mL
Fipronil sulfone	120068-36-2	-----	-----	P-780S-A *	Acetone	1 mL

Fipronil and Metabolite Kit

P-FIP-MET-KIT * 4 x 1 mL
P-738S-A, P-782S-A, P-781S-A, P-780S-A



* ColdPAK required to maintain integrity of product.

Technical Note

Fipronil is in the phenyl pyrazole class of pesticides. It is a broad-spectrum insecticide used in many different applications. It is used in many commercial topical flea and tick treatments for cats and dogs. Fipronil is used in these types of applications because it is not readily absorbed through the skin, and has a comparatively low toxicity if ingested.

Fipronil produces three notable metabolites: Fipronil Sulfide, Fipronil Sulfone and Fipronil Desulfinyl. These metabolites form under different conditions, and are of particular interest, because unlike the parent compound, they can be more toxic and environmentally persistent.

Volatile Organic Chemicals (VOCs) are generally classified as compounds that under normal ambient conditions can vaporize. This group includes aldehydes, ketones, as well as some light aromatic and straight chain hydrocarbons.

VOCs can enter the environment through many different routes. Many solvents, cleaners, paint thinners, dry cleaning solvents, and degreasers used both in industry and homes contain these compounds. Although not usually water soluble, if these compounds are released to the environment, they can still be found as contaminants in air, soil, as well as waste and drinking water.

EPA Volatile Methods:

502	Volatiles (PID/ELCD), Volatile Surrogates & ISTDs
503	VOC - Aromatics & Alkenes (PID/ELCD)
504	EDB & DBCP (ECD)
524	Volatiles (GC/MS)
551	Chlorinated Solvents, Trihalomethanes
556	Carbonyl Compounds (GC/ECD)
601	Purgeable Halocarbons (ELCD)

602	Purgeable Aromatics (PID)
603	Acrolein & Acrylonitrile (FID)
624	Purgeable Volatiles (GC/MS)
1666	PMI Volatiles (GC/MS)
8010	Halogenated Volatiles (ELCD)
8011	EDB & DBCP (GC/MS)
8015B	Non Halogenated Organics (GC/FID)

8020	Aromatic Volatiles (PID)
8021	Halogenated Volatiles PID/ELCD
8030	Acrolein & Acrylonitrile (GC/FID)
8031	Acrylonitrile (GC/NPD)
8032	Acrylamide (GC/ECD)
8033	Acetonitrile (NPD)

Neats are as stated, Solutions are 1 mL

VOCs

Compound	Conc.	Matrix	Cat. No.	Compound	Conc.	Matrix	Cat. No.
Acetonitrile 75-05-8	100 µg/mL	MeOH	APP-9-005	Bromotrichloromethane 75-62-7	100 mg	NEAT	K-009N
	10 mg/mL	Water	M-8015B/5031-02				
	1 mg/mL	Water	M-8033	1,3-Butadiene 106-99-0	0.2 mg/mL	MeOH	S-406A
	1 mg/mL	MeOH	APP-9-005-10X		2 mg/mL	MeOH	S-406A-10X
	5 mg/mL	MeOH	APP-9-005-50X	n-Butylbenzene 104-51-8	100 mg	NEAT	V-002
	5 mg/mL	IPA	AS-E0473		1 gram	NEAT	M-502-07N
Acrylamide 79-06-1	1 mg/mL	MeOH	M-8032		5 mg/mL	MeOH	AS-E1105
Acrylonitrile 107-13-1	100 µg/mL	MeOH	APP-9-008		0.2 mg/mL	MeOH	M-502-07
	10 mg/mL	Water	M-8015B/5031-04		2 mg/mL	MeOH	M-502-07-10X
	1 mg/mL	MeOH	APP-9-008-10X	iso-Butylbenzene 538-93-2	100 mg	NEAT	V-003
	10 mg/mL	MeOH	AS-E0003	sec-Butylbenzene 135-98-8	100 mg	NEAT	V-004
Allyl chloride 107-05-1	100 µg/mL	MeOH	APP-9-010		1 gram	NEAT	M-502-08N
	2 mg/mL	MeOH	APP-9-010-20X		5 mg/mL	MeOH	AS-E1104
	1 mg/mL	MeOH	AS-E0476		0.2 mg/mL	MeOH	M-502-08
n-Amylbenzene 538-68-1	100 mg	NEAT	V-001		2 mg/mL	MeOH	M-502-08-10X
Azobenzene 103-33-3	2 mg/mL	CH ₂ Cl ₂	Z-014B-1	tert-Butylbenzene 98-06-6	1 gram	NEAT	M-502-09N
Benzene 71-43-2	1 gram	NEAT	M-502-01N		5 mg/mL	MeOH	AS-E1106
	100 µg/mL	MeOH	APP-9-015		0.2 mg/mL	MeOH	M-502-09
	1 mg/mL	MeOH	AS-E0004		2 mg/mL	MeOH	M-502-09-10X
	0.2 mg/mL	MeOH	M-502-01	Carbon disulfide 75-15-0	100 µg/mL	MeOH	APP-9-035
	2 mg/mL	MeOH	M-502-01-10X		2 mg/mL	MeOH	APP-9-035-20X
Benzene-d₆ 1076-43-3	0.2 mg/mL	MeOH	M-624-SS-01		5 mg/mL	MeOH	AS-E0363
	2 mg/mL	MeOH	M-624-SS-01-10X	Carbon tetrabromide 558-13-4	100 mg	NEAT	K-006N
Benzyl chloride 100-44-7	0.2 mg/mL	MeOH	M-8010-01	Carbon tetrachloride 56-23-5	100 mg	NEAT	K-003N
	5 mg/mL	AcCN	AS-E0169		1 gram	NEAT	M-502-10N
2-Bromo-1-chloropropane 3017-95-6	20 mg/mL	MeOH	M-001R-3		100 µg/mL	MeOH	APP-9-036
	0.2 mg/mL	MeOH	M-624-SS-04		5 mg/mL	MeOH	AS-E0360
1-Bromo-2-nitrobenzene 577-19-5	1 mg/mL	Acetone	M-8081-IS-DC		0.2 mg/mL	MeOH	M-502-10
Bromobenzene 108-86-1	1 gram	NEAT	M-502-02N		2 mg/mL	MeOH	M-502-10-10X
	5 mg/mL	MeOH	AS-E0406	Chloral hydrate 302-17-0	1 mg/mL	MeOH	M-E-1179-M *
	0.2 mg/mL	MeOH	M-502-02		1 mg/mL	Acetone	AS-E1179
	2 mg/mL	MeOH	M-502-02-10X		5 mg/mL	Acetone	M-551B-2
Bromochloroacetonitrile 83463-62-1	1 mg/mL	Acetone	AS-E1186	1-Chloro-2-fluorobenzene 348-51-6	2 mg/mL	MeOH	S-163
	5 mg/mL	Acetone	M-551B-1	1-Chloro-3-nitrobenzene 121-73-3	1 mg/mL	Acetone	M-8091-SS-100X
2-Bromochlorobenzene 694-80-4	0.2 mg/mL	MeOH	M-624-SS-12	1-Chloro-4-fluorobenzene 352-33-0	0.2 mg/mL	MeOH	M-624-SS-13
4-Bromochlorobenzene 106-39-8	2 mg/mL	MeOH	M-8020-SS-1	Chlorobenzene 108-90-7	100 mg	NEAT	A-001
Bromochloromethane 74-97-5	100 mg	NEAT	K-007N		1 gram	NEAT	M-502-11N
	1 gram	NEAT	M-502-03N		100 µg/mL	MeOH	APP-9-039
	10 mg/mL	MeOH	AS-E0136		1 mg/mL	MeOH	AS-E0006
	0.2 mg/mL	MeOH	M-502-03		0.2 mg/mL	MeOH	M-502-11
	2 mg/mL	MeOH	M-502-03-10X		2 mg/mL	MeOH	M-502-11-10X
p-Bromofluorobenzene 460-00-4	25 µg/mL	MeOH	CLP-004	Chlorobenzene-d₅ 3114-55-4	5 mg/mL	MeOH	CLP-PI-3-5X
	250 µg/mL	MeOH	CLP-004-10X	Chloroethane 75-00-3	100 µg/mL	MeOH	APP-9-042
	0.15 mg/mL	MeOH	AS-E0233		1 mg/mL	MeOH	AS-E0015
	25 mg/mL	MeOH	CLP-004-1000X		0.2 mg/mL	MeOH	M-502-12
	2.5 mg/mL	MeOH	CLP-004-100X		2 mg/mL	MeOH	M-502-12-10X
	2 mg/mL	MeOH	CLP-004-80X	bis(2-Chloroethoxy)methane 111-91-1	100 µg/mL	CH ₂ Cl ₂	APP-9-026
	0.2 mg/mL	MeOH	M-624-SS-03		1 mg/mL	MeOH	APP-9-026-M-10X
	2 mg/mL	MeOH	M-624-SS-03-10X		5 mg/mL	MeOH	AS-E0041
	100 µg/mL	Acetone	M-551.1-IS	Chloroform 67-66-3	1 gram	NEAT	M-502-13N
	10 mg/mL	Acetone	M-551.1-IS-100X		0.2 mg/mL	MeOH	M-502-13
Bromoform 75-25-2	1 gram	NEAT	M-502-05N		2 mg/mL	MeOH	M-502-13-10X
	0.2 mg/mL	MeOH	M-502-05	1-Chlorohexane 544-10-5	0.2 mg/mL	MeOH	M-8010R-1-04
	2 mg/mL	MeOH	M-502-05-10X		2 mg/mL	MeOH	M-8010R-1-04-10X
	5 mg/mL	MeOH	AS-E0212	Chloromethane 74-87-3	100 µg/mL	MeOH	APP-9-044
Bromomethane 74-83-9	100 µg/mL	MeOH	APP-9-032		0.2 mg/mL	MeOH	M-502-14
	0.2 mg/mL	MeOH	M-502-06		2 mg/mL	MeOH	M-502-14-10X
	2 mg/mL	MeOH	M-502-06-10X				

* ColdPAK required to maintain integrity of product.

Neats are as stated, Solutions are 1 mL

VOCs

Compound	Conc.	Matrix	Cat. No.	Compound	Conc.	Matrix	Cat. No.
Chloroprene 126-99-8	100 µg/mL	MeOH	APP-9-048-R1	1,4-Dichlorobenzene 106-46-7	100 mg	NEAT	A-004
	200 µg/mL	MeOH	APP-9-048-R1-2X		1 gram	NEAT	M-502-23N
	1 mg/mL	MeOH	APP-9-048-R1-10X		100 µg/mL	MeOH	APP-9-066
	2.0 mg/mL	MeOH	APP-9-048-R1-20X		0.2 mg/mL	MeOH	M-502-23
3-Chloropropionitrile 542-76-7	1 mg/mL	MeOH	AS-E0375	1,4-Dichlorobenzene-d₄ 3855-82-1	2 mg/mL	MeOH	M-502-23-10X
2-Chlorotoluene 95-49-8	1 gram	NEAT	M-502-15N		5 mg/mL	MeOH	AS-E0025
	0.2 mg/mL	MeOH	M-502-15		0.2 mg/mL	Acetone	M-8151-IS-2
	2 mg/mL	MeOH	M-502-15-10X		2.0 mg/mL	Hexane	M-8120-04
3-Chlorotoluene 108-41-8	5 mg/mL	MeOH	AS-E0150	Dichlorobromomethane 75-27-4	2 mg/mL	MeOH	Z-014J-3-M-0.5X
4-Chlorotoluene 106-43-4	5 mg/mL	MeOH	AS-E0151		4 mg/mL	CH ₂ Cl ₂	Z-014J-3
	1 gram	NEAT	M-502-16N		100 mg	NEAT	M-502-04N
	0.2 mg/mL	MeOH	M-502-16		0.2 mg/mL	MeOH	M-502-04
Cyclohexane 110-82-7	2 mg/mL	MeOH	M-502-16-10X	1,4-Dichlorobutane 110-56-5	2 mg/mL	MeOH	M-502-04-10X
Decylbenzene 104-72-3	1 gram	NEAT	TK-102-08N		5 mg/mL	MeOH	AS-E0046
	2 mg/mL	MeOH	TK-102-08S-10X		0.2 mg/mL	MeOH	M-624-SS-05
Diallylate 2303-16-4	100 mg	NEAT	V-005	1,4-Dichlorobutane-d₄ 83547-96-0	20 mg/mL	MeOH	M-001R-2
1,2-Dibromochloromethane 124-48-1	1 mg/mL	AcCN	AS-E0623		0.15 mg/mL	MeOH	AS-E0196
	1 gram	NEAT	M-502-17N	Dichlorodifluoromethane 75-71-8	100 µg/mL	MeOH	APP-9-069
	0.2 mg/mL	MeOH	M-502-17		5000 µg/mL	MeOH	AS-E0346
2 mg/mL	MeOH	M-502-17-10X	0.2 mg/mL		MeOH	M-502-24	
1,2-Dibromo-3-chloropropane 96-12-8	1 gram	NEAT	M-502-18N		2 mg/mL	MeOH	M-502-24-10X
	0.2 mg/mL	MeOH	M-502-18	1,1-Dichloroethane 75-34-3	1 gram	NEAT	M-502-25N
	2 mg/mL	MeOH	M-502-18-10X		100 µg/mL	MeOH	APP-9-070
	5 mg/mL	MeOH	AS-E0993		0.2 mg/mL	MeOH	M-502-25
5 mg/mL	Acetone	M-551B-4	1 mg/mL		MeOH	AS-E0012	
Dibromoacetone 3252-43-5	1 gram	NEAT	M-502-19N **	1,2-Dichloroethane 107-06-2	2 mg/mL	MeOH	M-502-25-10X
1,2-Dibromoethane 106-93-4	100 µg/mL	MeOH	APP-9-214		1 gram	NEAT	M-502-26N
	0.2 mg/mL	MeOH	M-502-19		100 µg/mL	MeOH	APP-9-071
	2 mg/mL	MeOH	M-502-19-10X		1 mg/mL	MeOH	AS-E0009
	5 mg/mL	MeOH	AS-E0171	0.2 mg/mL	MeOH	M-502-26	
Dibromofluoromethane 1868-53-7	2 mg/mL	MeOH	M-8260-SS-2	2 mg/mL	MeOH	M-502-26-10X	
	2 mg/mL	MeOH	M-8260-SS-2-10X	1,2-Dichloroethane-d₄ 17060-07-0	0.2 mg/mL	MeOH	M-624-SS-06
	100 mg	NEAT	K-004N		2.0 mg/mL	MeOH	M-624-SS-06-10X
	1 gram	NEAT	M-502-20N		1 gram	NEAT	M-502-27N
100 µg/mL	MeOH	APP-9-062	100 µg/mL		MeOH	APP-9-072	
Dibromomethane 74-95-3	0.2 mg/mL	MeOH	M-502-20	1,1-Dichloroethene 75-35-4	0.2 mg/mL	MeOH	M-502-27
	2 mg/mL	MeOH	M-502-20-10X		2 mg/mL	MeOH	M-502-27-10X
	5 mg/mL	MeOH	AS-E1097		1 gram	NEAT	M-502-28N
	1 mg/mL	Acetone	M-8081-IS-X		0.2 mg/mL	MeOH	M-502-28
a,a-Dibromo-m-xylene 626-15-3	10 mg/mL	Hexane	M-556-IS	cis-1,2-Dichloroethene 156-59-2	2 mg/mL	MeOH	M-502-28-10X
1,2-Dibromopropane 78-75-1	5 mg/mL	MeOH	M-552-IS		10 mg/mL	MeOH	AS-E0173
	1000 µg/mL	MeOH	AS-E0463		1 gram	NEAT	M-502-29N
2,3-Dichloro-1-propene 78-88-6	4.2 mg/mL	MeOH	AS-E0170		trans-1,2-Dichloroethene 156-60-5	100 µg/mL	MeOH
trans-1,4-Dichloro-2-butene 110-57-6	100 µg/mL	MeOH	APP-9-068	0.2 mg/mL		MeOH	M-502-29
	2 mg/mL	MeOH	APP-9-068-20X	1 mg/mL		MeOH	AS-E0028
Dichloroacetone 3018-12-0	5 mg/mL	Acetone	M-551B-5	Dichlorofluoromethane 75-43-4		2 mg/mL	MeOH
1,2-Dichlorobenzene 95-50-1	100 mg	NEAT	A-002		0.2 mg/mL	MeOH	M-502-61
	1 gram	NEAT	M-502-21N		2 mg/mL	MeOH	M-502-61-10X
	100 µg/mL	MeOH	APP-9-064		Dichloromethane 75-09-2	100 mg	NEAT
	0.2 mg/mL	MeOH	M-502-21	1 gram		NEAT	M-502-39N
	2 mg/mL	MeOH	M-502-21-10X	100 µg/mL		MeOH	APP-9-074
	5 mg/mL	MeOH	AS-E0023	0.2 mg/mL		MeOH	M-502-39
1,2-Dichlorobenzene-d₄ 2199-69-1	2.0 mg/mL	Hexane	M-8120-02	2 mg/mL	MeOH	M-502-39-10X	
	0.15 mg/mL	MeOH	AS-E0776	1 gram	NEAT	M-502-30N	
	0.2 mg/mL	MeOH	M-624-SS-11	100 µg/mL	MeOH	APP-9-077	
	2 mg/mL	MeOH	M-624-SS-11-10X	0.2 mg/mL	MeOH	M-502-30	
1,3-Dichlorobenzene 541-73-1	100 mg	NEAT	A-003	1 mg/mL	MeOH	AS-E0030	
	1 gram	NEAT	M-502-22N	2 mg/mL	MeOH	M-502-30-10X	
	100 µg/mL	MeOH	APP-9-065	1,3-Dichloropropane 142-28-9	1 gram	NEAT	M-502-31N
	0.2 mg/mL	MeOH	M-502-22		0.2 mg/mL	MeOH	M-502-31
	1 mg/mL	MeOH	AS-E0214		2 mg/mL	MeOH	M-502-31-10X
	2 mg/mL	MeOH	M-502-22-10X		5 mg/mL	MeOH	AS-E1109
2.0 mg/mL	Hexane	M-8120-03	2,2-Dichloropropane 594-20-7	1 gram	NEAT	M-502-32N	
1,1-Dichloropropene 563-58-6	0.2 mg/mL	MeOH		M-502-22	0.2 mg/mL	MeOH	M-502-32
	1 mg/mL	MeOH		AS-E0214	2 mg/mL	MeOH	M-502-32-10X
	2 mg/mL	MeOH		M-502-22-10X	5 mg/mL	MeOH	AS-E1167
	2.0 mg/mL	Hexane	M-8120-03	1,3-Dichloropropene (cis/trans) 542-75-6	1 gram	NEAT	M-502-34N
1,1-Dichloropropene 563-58-6	0.2 mg/mL	MeOH	M-502-22		0.2 mg/mL	MeOH	M-502-34
	1 mg/mL	MeOH	AS-E0214		0.4 mg/mL	MeOH	M-502-34-R
	2 mg/mL	MeOH	M-502-22-10X		4 mg/mL	MeOH	M-502-34-R-10X
cis-1,3-Dichloropropene 10061-01-5	2.0 mg/mL	Hexane	M-8120-03	trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-33
	1 gram	NEAT	M-502-22N		2 mg/mL	MeOH	M-502-33-10X
	100 µg/mL	MeOH	APP-9-065		100 µg/mL	MeOH	APP-9-078
	0.2 mg/mL	MeOH	M-502-22	1,3-Dichloropropylene (cis & trans)	5 mg/mL	MeOH	AS-E0218
trans-1,3-Dichloropropene 10061-02-6	1 mg/mL	MeOH	AS-E0214		1 gram	NEAT	M-502-34N
	2 mg/mL	MeOH	M-502-22-10X	0.2 mg/mL	MeOH	M-502-34	
cis-1,3-Dichloropropene 10061-01-5	2.0 mg/mL	Hexane	M-8120-03	trans-1,3-Dichloropropene 10061-02-6	0.4 mg/mL	MeOH	M-502-34-R
	1 gram	NEAT	M-502-22N		4 mg/mL	MeOH	M-502-34-R-10X
trans-1,3-Dichloropropene 10061-02-6	100 µg/mL	MeOH	APP-9-065	1,3-Dichloropropylene (cis & trans)	0.2 mg/mL	MeOH	M-502-33
	0.2 mg/mL	MeOH	M-502-22		2 mg/mL	MeOH	M-502-33-10X
cis-1,3-Dichloropropene 10061-01-5	1 mg/mL	MeOH	AS-E0214	trans-1,3-Dichloropropene 10061-02-6	100 µg/mL	MeOH	APP-9-078
	2 mg/mL	MeOH	M-502-22-10X		100 µg/mL	MeOH	APP-9-079
trans-1,3-Dichloropropene 10061-02-6	100 µg/mL	MeOH	APP-9-065	1,3-Dichloropropylene (cis & trans)	5 mg/mL	MeOH	AS-E0218
	0.2 mg/mL	MeOH	M-502-22		1 gram	NEAT	M-502-34N
cis-1,3-Dichloropropene 10061-01-5	1 mg/mL	MeOH	AS-E0214	trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-34
	2 mg/mL	MeOH	M-502-22-10X		0.4 mg/mL	MeOH	M-502-34-R
trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-22-10X	1,3-Dichloropropylene (cis & trans)	4 mg/mL	MeOH	M-502-34-R-10X
	2.0 mg/mL	Hexane	M-8120-03		0.2 mg/mL	MeOH	M-502-33
cis-1,3-Dichloropropene 10061-01-5	1 gram	NEAT	M-502-22N	trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-33-10X
	100 µg/mL	MeOH	APP-9-065		100 µg/mL	MeOH	APP-9-078
trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-22	1,3-Dichloropropylene (cis & trans)	5 mg/mL	MeOH	AS-E0218
	1 mg/mL	MeOH	AS-E0214		1 gram	NEAT	M-502-34N
cis-1,3-Dichloropropene 10061-01-5	2 mg/mL	MeOH	M-502-22-10X	trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-34
	2.0 mg/mL	Hexane	M-8120-03		0.4 mg/mL	MeOH	M-502-34-R
trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-22-10X	1,3-Dichloropropylene (cis & trans)	4 mg/mL	MeOH	M-502-34-R-10X
	2.0 mg/mL	Hexane	M-8120-03		0.2 mg/mL	MeOH	M-502-33
cis-1,3-Dichloropropene 10061-01-5	1 gram	NEAT	M-502-22N	trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-33-10X
	100 µg/mL	MeOH	APP-9-065		100 µg/mL	MeOH	APP-9-078
trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-22	1,3-Dichloropropylene (cis & trans)	5 mg/mL	MeOH	AS-E0218
	1 mg/mL	MeOH	AS-E0214		1 gram	NEAT	M-502-34N
cis-1,3-Dichloropropene 10061-01-5	2 mg/mL	MeOH	M-502-22-10X	trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-34
	2.0 mg/mL	Hexane	M-8120-03		0.4 mg/mL	MeOH	M-502-34-R
trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-22-10X	1,3-Dichloropropylene (cis & trans)	4 mg/mL	MeOH	M-502-34-R-10X
	2.0 mg/mL	Hexane	M-8120-03		0.2 mg/mL	MeOH	M-502-33
cis-1,3-Dichloropropene 10061-01-5	1 gram	NEAT	M-502-22N	trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-33-10X
	100 µg/mL	MeOH	APP-9-065		100 µg/mL	MeOH	APP-9-078
trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-22	1,3-Dichloropropylene (cis & trans)	5 mg/mL	MeOH	AS-E0218
	1 mg/mL	MeOH	AS-E0214		1 gram	NEAT	M-502-34N
cis-1,3-Dichloropropene 10061-01-5	2 mg/mL	MeOH	M-502-22-10X	trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-34
	2.0 mg/mL	Hexane	M-8120-03		0.4 mg/mL	MeOH	M-502-34-R
trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-22-10X	1,3-Dichloropropylene (cis & trans)	4 mg/mL	MeOH	M-502-34-R-10X
	2.0 mg/mL	Hexane	M-8120-03		0.2 mg/mL	MeOH	M-502-33
cis-1,3-Dichloropropene 10061-01-5	1 gram	NEAT	M-502-22N	trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-33-10X
	100 µg/mL	MeOH	APP-9-065		100 µg/mL	MeOH	APP-9-078
trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-22	1,3-Dichloropropylene (cis & trans)	5 mg/mL	MeOH	AS-E0218
	1 mg/mL	MeOH	AS-E0214		1 gram	NEAT	M-502-34N
cis-1,3-Dichloropropene 10061-01-5	2 mg/mL	MeOH	M-502-22-10X	trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-34
	2.0 mg/mL	Hexane	M-8120-03		0.4 mg/mL	MeOH	M-502-34-R
trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-22-10X	1,3-Dichloropropylene (cis & trans)	4 mg/mL	MeOH	M-502-34-R-10X
	2.0 mg/mL	Hexane	M-8120-03		0.2 mg/mL	MeOH	M-502-33
cis-1,3-Dichloropropene 10061-01-5	1 gram	NEAT	M-502-22N	trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-33-10X
	100 µg/mL	MeOH	APP-9-065		100 µg/mL	MeOH	APP-9-078
trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-22	1,3-Dichloropropylene (cis & trans)	5 mg/mL	MeOH	AS-E0218
	1 mg/mL	MeOH	AS-E0214		1 gram	NEAT	M-502-34N
cis-1,3-Dichloropropene 10061-01-5	2 mg/mL	MeOH	M-502-22-10X	trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-34
	2.0 mg/mL	Hexane	M-8120-03		0.4 mg/mL	MeOH	M-502-34-R
trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-22-10X	1,3-Dichloropropylene (cis & trans)	4 mg/mL	MeOH	M-502-34-R-10X
	2.0 mg/mL	Hexane	M-8120-03		0.2 mg/mL	MeOH	M-502-33
cis-1,3-Dichloropropene 10061-01-5	1 gram	NEAT	M-502-22N	trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-33-10X
	100 µg/mL	MeOH	APP-9-065		100 µg/mL	MeOH	APP-9-078
trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-22	1,3-Dichloropropylene (cis & trans)	5 mg/mL	MeOH	AS-E0218
	1 mg/mL	MeOH	AS-E0214		1 gram	NEAT	M-502-34N
cis-1,3-Dichloropropene 10061-01-5	2 mg/mL	MeOH	M-502-22-10X	trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-34
	2.0 mg/mL	Hexane	M-8120-03		0.4 mg/mL	MeOH	M-502-34-R
trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-22-10X	1,3-Dichloropropylene (cis & trans)	4 mg/mL	MeOH	M-502-34-R-10X
	2.0 mg/mL	Hexane	M-8120-03		0.2 mg/mL	MeOH	M-502-33
cis-1,3-Dichloropropene 10061-01-5	1 gram	NEAT	M-502-22N	trans-1,3-Dichloropropene 10061-02-6	2 mg/mL	MeOH	M-502-33-10X
	100 µg/mL	MeOH	APP-9-065		100 µg/mL	MeOH	APP-9-078
trans-1,3-Dichloropropene 10061-02-6	0.2 mg/mL	MeOH	M-502-22	1,3-Dichloropropylene (cis & trans)	5 mg/mL	MeOH	AS-E0218
	1 mg/mL	MeOH	AS-E0214		1 gram	NEAT	M-502-34N

* ColdPAK required to maintain integrity of product.

** This product can not ship by air.

Neats are as stated, Solutions are 1 mL

VOCs

Compound	Conc.	Matrix	Cat. No.	Compound	Conc.	Matrix	Cat. No.
1,1-Dichloro-1-propylene 563-58-6	5 mg/mL	MeOH	AS-E1166	Hexachlorocyclopentadiene 77-47-4	100 µg/mL	MeOH	APP-9-114
2,4-Dichlorotoluene 95-73-8	5 mg/mL	MeOH	AS-E0149		1 mg/mL	MeOH	APP-9-114-10X
1,2,3,4-Diepoxybutane 1464-53-5	1 mg/mL	AcCN	AS-E0577		2.0 mg/mL	Hexane	M-8120-07
1,4-Diethylbenzene 105-05-5	100 mg	NEAT	V-008	Hexachloroethane 67-72-1	100 µg/mL	MeOH	APP-9-115
m-Diethylbenzene 141-93-5	100 µg/mL	Isooctane	M-GRA-ST		1 mg/mL	MeOH	AS-E0011
	100 mg	NEAT	V-007		2.0 mg/mL	Hexane	M-8120-08
o-Diethylbenzene 135-01-3	100 mg	NEAT	V-006	Hexachlorophene 70-30-4	100 µg/mL	MeOH	APP-9-116
1,4-Difluorobenzene 540-36-3	0.2 mg/mL	MeOH	M-624-SS-07		2 mg/mL	CH ₂ Cl ₂	APP-9-116-D-20X
	2 mg/mL	MeOH	M-624-SS-07-10X	Hexachloropropene 1888-71-7	5 mg/mL	MeOH	AS-E0323
Dimethyl sulfate 77-78-1	1 mg/mL	AcCN	AS-E0389		100 µg/mL	MeOH	APP-9-117
1,3-Dimethyl-2-nitrobenzene 81-20-9	0.2 mg/mL	MtBE	M-507-SS		1 mg/mL	MeOH	AS-E0364
				Hexadecylbenzene 1459-09-2	100 mg	NEAT	V-015
1,3-Dinitrobenzene 99-65-0	100 µg/mL	CH ₂ Cl ₂	APP-9-089	Hexylbenzene 1077-16-3	100 mg	NEAT	V-013
	1 mg/mL	CH ₂ Cl ₂	APP-9-089-10X	Isopropylbenzene 98-82-8	1 gram	NEAT	M-502-37N
	5 mg/mL	MeOH	AS-E0527		0.2 mg/mL	MeOH	M-502-37
2,5-Dinitrotoluene 619-15-8	100 µg/mL	AcCN	M-8095-SS-03		2 mg/mL	MeOH	M-502-37-10X
3,4-Dinitrotoluene 610-39-9	100 µg/mL	AcCN	M-8095-SS-01	p-Isopropyltoluene (p-Cymene) 99-87-6	1 gram	NEAT	M-502-38N
Dodecylbenzene 123-01-3	100 mg	NEAT	V-009		5 mg/mL	MeOH	AS-E1108
Epichlorohydrin 106-89-8	5 mg/mL	AcCN	AS-E0258		0.2 mg/mL	MeOH	M-502-38
1,2-Epoxybutane 106-88-7	5 mg/mL	AcCN	AS-E0286		2 mg/mL	MeOH	M-502-38-10X
1,2-Epoxypropane(Propylene oxide) 75-56-9	1 mg/mL	AcCN	AS-E0308	Methacrylonitrile 126-98-7	100 µg/mL	MeOH	APP-9-125
Ethyl acetate 141-78-6	10 mg/mL	Water	M-8015B/5031-12		1 mg/mL	MeOH	AS-E0686
Ethyl methacrylate 97-63-2	100 µg/mL	MeOH	APP-9-105	Methyl 2,3-dibromopropionate 1729-67-5	1 mg/mL	MtBE	M-552.2-SS-ME
	1 mg/mL	MeOH	AS-E0687	Methyl 2-bromopropionate 5445-17-0	1 mg/mL	MtBE	M-552.1-SS-ME
Ethyl methanesulfonate 62-50-0	100 µg/mL	CH ₂ Cl ₂	APP-9-106	Methyl bromide 74-83-9	1 mg/mL	AcCN	AS-E0044
	1 mg/mL	AcCN	AS-E0456	Methyl chloride 74-87-3	5 mg/mL	MeOH	AS-E0043
Ethylbenzene 100-41-4	1 gram	NEAT	M-502-35N	1-Methyl ethyl benzene 98-82-8	5 mg/mL	MeOH	AS-E0669
	100 µg/mL	MeOH	APP-9-104	Methyl iodide 74-88-4	100 µg/mL	MeOH	APP-9-130
	0.2 mg/mL	MeOH	M-502-35		2.0 mg/mL	MeOH	APP-9-130-20X
	2 mg/mL	MeOH	M-502-35-10X	Methyl isothiocyanate 556-61-6	25 µg/mL	Acetone	M-1659-RPS
	10 mg/mL	MeOH	AS-E0036	Methyl methacrylate 80-62-6	100 µg/mL	MeOH	APP-9-131
Ethylbenzene-d ₁₀ 25837-05-2	0.2 mg/mL	MeOH	M-624-SS-08		1 mg/mL	MeOH	AS-E0439
Ethylene glycol 107-21-1	2 mg/mL	Water	D-4291-93		2 mg/mL	MeOH	APP-9-131-20X
Ethylene oxide 75-21-8	0.2 mg/mL	Isooctane	S-354-2	Methyl methanesulfonate 66-27-3	100 µg/mL	CH ₂ Cl ₂	APP-9-132
	5 mg/mL	Water	M-8015B/5031-14-R1 *		1 mg/mL	AcCN	AS-E0431
m-Ethyltoluene 620-14-4	100 mg	NEAT	V-031	Methylene chloride 75-09-2	1 mg/mL	MeOH	AS-E0042
o-Ethyltoluene 611-14-3	100 mg	NEAT	V-010	Methylene chloride-d ₂ 1665-00-5	2 mg/mL	MeOH	M-502-IS-2-3
p-Ethyltoluene 622-96-8	100 mg	NEAT	V-011	Naphthalene 91-20-3	1 gram	NEAT	M-502-40N
2-Fluoroacetamide 640-19-7	5 mg/mL	AcCN	AS-E0299		2 mg/mL	MeOH	M-502-40-10X
Fluorobenzene 462-06-6	0.15 mg/mL	MeOH	AS-E0232	Nitrobenzene 98-95-3	100 µg/mL	MeOH	APP-9-143
	0.2 mg/mL	MeOH	M-624-SS-09		1 mg/mL	MeOH	APP-9-143-10X
	2 mg/mL	MeOH	M-524-IS-2		5 mg/mL	MeOH	AS-E0054
	20 mg/mL	MeOH	M-524-IS-2-10X	Nitrobenzene-d ₅ 4165-60-0	0.2 mg/mL	CH ₂ Cl ₂	M-625-13
Fluorotrichloromethane 75-69-4	5 mg/mL	MeOH	AS-E0047		2.0 mg/mL	CH ₂ Cl ₂	M-625-13-10X
Heptadecylbenzene 14752-75-1	100 mg	NEAT	V-014	Nonadecylbenzene 29136-19-4	100 mg	NEAT	V-018
Heptylbenzene 1078-71-3	100 mg	NEAT	V-012	Nonylbenzene 1081-77-2	100 mg	NEAT	V-017
Hexachlorobenzene 118-74-1	100 mg	NEAT	A-012	Octadecylbenzene 4445-07-2	100 mg	NEAT	V-020
	100 µg/mL	MeOH	APP-9-112	Octylbenzene 2189-60-8	100 mg	NEAT	V-019
	1 mg/mL	Acetone	M-8091-IS-20X	Pentachlorobenzene 608-93-5	100 mg	NEAT	A-011
	2 mg/mL	CH ₂ Cl ₂	APP-9-112-D-20X		100 µg/mL	MeOH	APP-9-173
	2.0 mg/mL	Hexane	M-8120-05		2.5 mg/mL	MeOH	AS-E0260
Hexachlorobutadiene 87-68-3	1 gram	NEAT	M-502-36N	Pentachloroethane 76-01-7	100 µg/mL	MeOH	APP-9-174
	100 µg/mL	MeOH	APP-9-113		2.0 mg/mL	MeOH	APP-9-174-20X
	0.2 mg/mL	MeOH	M-502-36		5 mg/mL	MeOH	AS-E0300
	2 mg/mL	MeOH	M-502-36-10X	Pentadecylbenzene 2131-18-2	100 mg	NEAT	V-021
	5 mg/mL	MeOH	AS-E0050	Pentafluorobenzene 363-72-4	0.2 mg/mL	MeOH	M-624-SS-10
	2.0 mg/mL	Hexane	M-8120-06	1,2-Propanediol 57-55-6	1 mg/mL	AcCN	AS-E0524
				Propionic acid 79-09-4	5 mg/mL	AcCN	AS-E0673
				Propionitrile 107-12-0	100 µg/mL	MeOH	APP-9-184
					5 mg/mL	MeOH	AS-E0338
					10 mg/mL	Water	M-8015B/5031-25

* ColdPAK required to maintain integrity of product.

Neats are as stated, Solutions are 1 mL

VOCs

Compound	Conc.	Matrix	Cat. No.	Compound	Conc.	Matrix	Cat. No.
n-Propylbenzene (1-Phenylpropane) 103-65-1	100 mg	NEAT	V-022	1,1,2-Trichloroethane 79-00-5	1 gram	NEAT	M-502-50N
	1 gram	NEAT	M-502-41N		100 µg/mL	MeOH	APP-9-203
	0.2 mg/mL	MeOH	M-502-41		0.2 mg/mL	MeOH	M-502-50
	2 mg/mL	MeOH	M-502-41-10X		1 mg/mL	MeOH	AS-E0013
	5 mg/mL	MeOH	AS-E1112		2 mg/mL	MeOH	M-502-50-10X
Styrene 100-42-5	1 gram	NEAT	M-502-42N	Trichloroethene 79-01-6	1 gram	NEAT	M-502-51N
	100 µg/mL	MeOH	APP-9-189		100 µg/mL	MeOH	APP-9-204
	0.2 mg/mL	MeOH	M-502-42		0.2 mg/mL	MeOH	M-502-51
	2 mg/mL	MeOH	M-502-42-10X		1 mg/mL	MeOH	AS-E0085
	5 mg/mL	MeOH	AS-E0257		2 mg/mL	MeOH	M-502-51-10X
TCMX 877-09-8	100 µg/mL	Hexane	M-8082-SS	Trichlorofluoromethane 75-69-4	100 µg/mL	MeOH	APP-9-205
	1 mg/mL	Hexane	M-8082-SS-10X		0.2 mg/mL	MeOH	M-502-52
1,2,3,4-Tetrachlorobenzene 634-66-2	100 mg	NEAT	A-008		2 mg/mL	MeOH	M-502-52-10X
	1 mg/mL	MeOH	AS-E0225	1,1,2-Trichloropropane 598-77-6	200 µg/mL	MeOH	S-1321B
1,2,3,5-Tetrachlorobenzene 634-90-2	100 mg	NEAT	A-009	1,2,3-Trichloropropane 96-18-4	1 gram	NEAT	M-502-53N
1,2,4,5-Tetrachlorobenzene 95-94-3	100 mg	NEAT	A-010		100 µg/mL	MeOH	APP-9-208
	100 µg/mL	MeOH	APP-9-191		0.2 mg/mL	MeOH	M-502-53
	1.0 mg/mL	MeOH	APP-9-191-10X		1 mg/mL	MeOH	APP-9-208-10X
	2.0 mg/mL	Hexane	M-8120-09		2 mg/mL	MeOH	M-502-53-10X
	2.5 mg/mL	AcCN	AS-E0177		5 mg/mL	MeOH	AS-E0368
1,1,1,2-Tetrachloroethane 630-20-6	1 gram	NEAT	M-502-43N	a,a,a-Trichlorotoluene 98-07-7	0.2 mg/mL	MeOH	M-624-SS-14
	100 µg/mL	MeOH	APP-9-192	Tridecylbenzene 123-02-4	100 mg	NEAT	V-027
	0.2 mg/mL	MeOH	M-502-43	1,2,3-Trimethylbenzene 526-73-8	100 mg	NEAT	V-028
	1 mg/mL	MeOH	AS-E0335	1,2,4-Trimethylbenzene 95-63-6	100 mg	NEAT	V-029
	2 mg/mL	MeOH	M-502-43-10X		1 gram	NEAT	M-502-54N
1,1,2,2-Tetrachloroethane 79-34-5	1 gram	NEAT	M-502-44N		0.2 mg/mL	MeOH	M-502-54
	100 µg/mL	MeOH	APP-9-193		2 mg/mL	MeOH	M-502-54-10X
	0.2 mg/mL	MeOH	M-502-44		5 mg/mL	MeOH	AS-E1107
	2 mg/mL	MeOH	M-502-44-10X	1,3,5-Trimethylbenzene 108-67-8	100 mg	NEAT	V-016
	5 mg/mL	MeOH	AS-E0014		1 gram	NEAT	M-502-55N
Tetrachloroethene 127-18-4	1 gram	NEAT	M-502-45N		0.2 mg/mL	MeOH	M-502-55
	100 µg/mL	MeOH	APP-9-194		2 mg/mL	MeOH	M-502-55-10X
	0.2 mg/mL	MeOH	M-502-45		5 mg/mL	MeOH	AS-E1103
	2 mg/mL	MeOH	M-502-45-10X	1,2,3-Trimethylbenzene 526-73-8	3 % w/w	Isooctane	M-GRA-FP
	5 mg/mL	MeOH	AS-E0083	1,3,5-Trinitrobenzene 99-35-4	100 µg/mL	MeOH	APP-9-210
Tetrachloro-m-xylene 877-09-8	0.2 mg/mL	MeOH	S-279		2 mg/mL	MeOH	M-8270-10
	1 mg/mL	MeOH	S-279-5X	Undecylbenzene 6742-54-7	2.0 mg/mL	CH ₂ Cl ₂	APP-9-210-D-20X
Tetradecylbenzene 1459-10-5	100 mg	NEAT	V-023	Vinyl acetate 108-05-4	100 mg	NEAT	V-030
Tetrahydrofuran 109-99-9	0.2 mg/mL	MeOH	S-457S		100 µg/mL	MeOH	APP-9-211 *
	2 mg/mL	MeOH	S-457S-10X		2 mg/mL	MeOH	APP-9-211-20X *
	1 mg/mL	Water	M-1671A-IS		1 mg/mL	AcCN	AS-E0327
1,2,3,4-Tetramethylbenzene 488-23-3	100 mg	NEAT	V-024	Vinyl chloride 75-01-4	100 µg/mL	MeOH	APP-9-212
1,2,3,5-Tetramethylbenzene 527-53-7	100 mg	NEAT	V-025		0.2 mg/mL	MeOH	M-502-56
1,2,4,5-Tetramethylbenzene 95-93-2	100 mg	NEAT	V-026		1 mg/mL	MeOH	AS-E0536
Toluene 108-88-3	1 gram	NEAT	M-502-46N	Xylene (total) 1330-20-7	2 mg/mL	MeOH	M-502-56-10X
	100 µg/mL	MeOH	APP-9-198	m-Xylene 108-38-3	100 µg/mL	MeOH	APP-9-213
	0.2 mg/mL	MeOH	M-502-46		1 gram	NEAT	M-502-58N
	1 mg/mL	MeOH	AS-E0084		0.2 mg/mL	MeOH	M-502-58
	2 mg/mL	MeOH	M-502-46-10X		1 mg/mL	MeOH	AS-E0202
Toluene-d₈ 2037-26-5	0.25 mg/mL	MeOH	CLP-PS-3		2 mg/mL	MeOH	M-502-58-10X
	2.5 mg/mL	MeOH	CLP-PS-3-10X	o-Xylene 95-47-6	1 gram	NEAT	M-502-57N
1,3,5-Tribromobenzene 626-39-1	50 µg/mL	Acetone	M-8121-IS		0.2 mg/mL	MeOH	M-502-57
Trichloroacetonitrile 545-06-2	5 mg/mL	Acetone	M-551B-7		1 mg/mL	MeOH	AS-E0201
1,2,3-Trichlorobenzene 87-61-6	100 mg	NEAT	A-005	p-Xylene 106-42-3	2 mg/mL	MeOH	M-502-57-10X
	1 gram	NEAT	M-502-47N		1 gram	NEAT	M-502-59N
	0.2 mg/mL	MeOH	M-502-47		0.2 mg/mL	MeOH	M-502-59
	2 mg/mL	MeOH	M-502-47-10X		1 mg/mL	MeOH	AS-E0203
	5 mg/mL	MeOH	AS-E0175		2 mg/mL	MeOH	M-502-59-10X
1,2,4-Trichlorobenzene 120-82-1	100 mg	NEAT	A-006				
	1 gram	NEAT	M-502-48N				
	100 µg/mL	MeOH	APP-9-201				
	0.2 mg/mL	MeOH	M-502-48				
	1 mg/mL	MeOH	AS-E0007				
	2 mg/mL	MeOH	M-502-48-10X				
1,3,5-Trichlorobenzene 108-70-3	100 mg	NEAT	A-007				
	5 mg/mL	MeOH	AS-E0176				
1,1,1-Trichloroethane 71-55-6	100 µg/mL	MeOH	APP-9-202				
	0.2 mg/mL	MeOH	M-502-49				
	1 mg/mL	MeOH	AS-E0010				
	2 mg/mL	MeOH	M-502-49-10X				

* ColdPAK required to maintain integrity of product.

Analytes by Functional Group

Alcohols & Aldehydes and Derivatives



In order to make it easier to find individual standards, AccuStandard has now organized them by functional group, as well as by application, and of course they are still listed with their applicable USEPA methods.



Search by

✓ **Functional Group**

Application

EPA Method

See Qualitative Analysis Kits for material of these functional groups. pages 109-111

By Functional Group	71-80
Alcohols	71
Aldehydes & Derivatives	71-72
Ketones	72
Phenols	73-74
Amines, Anilines, Amino Compounds	74-76
Ethers	77
Halo Ethers	77
Haloacetic Acids	77
Fatty Acid Ethyl Esters	97
Phthalates UPDATED	78-80

Alcohol EPA Methods include: 1673, 8015

Alcohols				
Compound	CAS No.	Conc.	Matrix	Cat. No.
Allyl alcohol	107-18-6	1 mg/mL	MeOH	AS-E0475
		10 mg/mL	Water	M-8015B/5031-05
Benzyl alcohol	100-51-6	100 µg/mL	MeOH	APP-9-021
		5 mg/mL	MeOH	APP-9-021-50X
		5 mg/mL	AcCN	AS-E0326
1-Butanol	71-36-3	10 mg/mL	Water	M-8015B/5031-06
t-Butanol	75-65-0	10 mg/mL	Water	M-8015B/5031-07
		2 mg/mL	MeOH	S-410
1,3-Dichloro-2-propanol	96-23-1	5 mg/mL	MeOH	AS-E0928
Ethanol	64-17-5	10 mg/mL	Water	M-8015B/5031-11
Ethylene glycol	107-21-1	10 mg/mL	Water	M-8015B/5031-13
Isobutanol (Isobutyl alcohol)	78-83-1	10 mg/mL	Water	M-8015B/5031-15
		100 µg/mL	MeOH	APP-9-120
		2.0 mg/mL	MeOH	APP-9-120-20X
Isopropanol	67-63-0	10 mg/mL	Water	M-8015B/5031-16
Methanol	67-56-1	10 mg/mL	Water	M-8015B/5031-17
2-Methyl-1-propanol (Isobutyl alcohol)	78-83-1	5 mg/mL	MeOH	AS-E0659
Polyethylene glycol (PEG-600)	25322-68-3	2.5 mg/mL	THF	M-1673
1-Propanol	71-23-8	10 mg/mL	Water	M-8015B/5031-24
Propargyl alcohol	107-19-7	1 mg/mL	Cyclo-hexanone	AS-E0543

Neats are as stated, Solutions are 1 mL

Aldehydes EPA Methods include: 554, 556, 1667A, 8315, 8315A

Aldehydes and Derivatives				
Compound	CAS No.	Conc.	Matrix	Cat. No.
Acetaldehyde	75-07-0	1 mg/mL	MeOH	M-554-01 *
		1 mg/mL	Water	M-8315-01
Acetaldehyde-DNPH	1019-57-4	1 mg/mL	MeOH:AcCN	M-554-DNPH-01
		0.1 mg/mL	AcCN	M-8315-R-DNPH-01
Acrolein	107-02-8	100 µg/mL	MeOH:Water	APP-9-007 *
		1 mg/mL	MeOH:Water	APP-9-007-10X *
		100 µg/mL	Water	APP-9-007-W
		1.0 mg/mL	Water	APP-9-007-W-10X
		5 mg/mL	p-Dioxane	AS-E0002
		10 mg/mL	Water	M-8015B/5031-03
Acrolein-DNPH	888-54-0	0.1 mg/mL	AcCN	M-8315-R-DNPH-03
		1 µg/mL	AcCN	S-1275-1-03
Benzaldehyde-DNPH	1157-84-2	0.1 mg/mL	AcCN	M-8315-R-DNPH-04
Butanal	123-72-8	1 mg/mL	MeOH	M-554-02 *
Butanal-DNPH	1527-98-6	1 mg/mL	MeOH:AcCN	M-554-DNPH-02
		0.1 mg/mL	AcCN	M-8315-R-DNPH-05
Crotonaldehyde	123-73-9	1 mg/mL	AcCN	AS-E0479
		1 mg/mL	MeOH	M-554-03 *
		10 mg/mL	Water	M-8015B/5031-08
Crotonaldehyde-DNPH	1527-96-4	1 mg/mL	MeOH:AcCN	M-554-DNPH-03
		0.1 mg/mL	AcCN	M-8315-R-DNPH-06
Decanal	112-31-2	1 mg/mL	MeOH	M-554-05
Decanal-DNPH		1 mg/mL	MeOH:AcCN	M-554-DNPH-05
		0.1 mg/mL	AcCN	M-8315-R-DNPH-08
2,5-Dimethylbenzaldehyde-DNPH	152477-96-8	0.1 mg/mL	AcCN	M-8315-R-DNPH-09

* ColdPAK required to maintain integrity of product.

Aldehydes continued on next page



Analytes by Functional Group

Aldehydes and Derivatives & Ketones

Aldehydes and Derivatives (continued)

Compound	CAS No.	Conc.	Matrix	Cat. No.
Formaldehyde	50-00-0	1 mg/mL	MeOH	M-554-06 *
		1 mg/mL	Water	M-8315-02
Formaldehyde-DNPH	1081-15-8	1.0 mg/mL	AcCN	M-1667A-DNPH-01
		1 mg/mL	MeOH:AcCN	M-554-DNPH-06
		0.1 mg/mL	AcCN	M-8315-R-DNPH-10
Formamide	75-12-7	50 µg/mL	Water	M-1666A-DI-R-ADD2
2-Furaldehyde-DNPH		1.0 mg/mL	AcCN	M-1667A-DNPH-02
Heptanal	111-71-7	1 mg/mL	MeOH	M-554-07
Heptanal-DNPH		1 mg/mL	MeOH:AcCN	M-554-DNPH-07
		0.1 mg/mL	AcCN	M-8315-R-DNPH-11
Hexanal	66-25-1	1 mg/mL	MeOH	M-554-08
Hexanal-DNPH	1527-97-5	1 mg/mL	MeOH:AcCN	M-554-DNPH-08
		0.1 mg/mL	AcCN	M-8315-R-DNPH-12
		1.0 mg/mL	AcCN	M-1667A-DNPH-03
Isobutyraldehyde-DNPH		0.1 mg/mL	AcCN	M-8315-R-DNPH-13
		1 mg/mL	MeOH	M-554-09
Nonanal	124-19-6	1 mg/mL	MeOH:AcCN	M-554-DNPH-09
Nonanal-DNPH		0.1 mg/mL	AcCN	M-8315-R-DNPH-14
		1 mg/mL	MeOH	M-554-10
Octanal	124-13-0	1 mg/mL	MeOH:AcCN	M-554-DNPH-10
Octanal-DNPH		0.1 mg/mL	AcCN	M-8315-R-DNPH-15
		10 mg/mL	Water	M-8015B/5031-21
Paraldehyde	123-63-7	1 mg/mL	MeOH	M-554-11
Pentanal	110-62-3	1 mg/mL	MeOH	M-554-11
Pentanal-DNPH	2057-84-3	1 mg/mL	MeOH:AcCN	M-554-DNPH-11
		0.1 mg/mL	AcCN	M-8315-R-DNPH-16
Propanal	123-38-6	1 mg/mL	MeOH	M-554-12 *
Propanal-DNPH	725-00-8	1 mg/mL	MeOH:AcCN	M-554-DNPH-12
		0.1 mg/mL	AcCN	M-8315-R-DNPH-17
m-Tolualdehyde-DNPH	2880-05-9	0.1 mg/mL	AcCN	M-8315-R-DNPH-18
o-Tolualdehyde-DNPH	1773-44-0	0.1 mg/mL	AcCN	M-8315-R-DNPH-19
p-Tolualdehyde-DNPH	2571-00-8	0.1 mg/mL	AcCN	M-8315-R-DNPH-20

Neats are as stated,
Solutions are 1 mL

Ketones EPA Methods include: 554, 556, 8091, 8315, 8315A

Ketones and Derivatives

Compound	CAS No.	Conc.	Matrix	Cat. No.
Acetone	67-64-1	100 µg/mL	MeOH	APP-9-003 *
		2 mg/mL	MeOH	APP-9-003-20X *
		5 mg/mL	MeOH	AS-E0284 *
		10 mg/mL	Water	M-8015B/5031-01
Acetone-DNPH	1567-89-1	0.1 mg/mL	AcCN	M-8315-R2-DNPH-02
Acetophenone	98-86-2	100 µg/mL	CH ₂ Cl ₂	APP-9-004
		2 mg/mL	CH ₂ Cl ₂	APP-9-004-20X
		5 mg/mL	MeOH	AS-E0411
2-Chloroacetophenone	532-27-4	100 µg/mL	Hexane	IRT-001S
2'-Chloroacetophenone	2142-68-9	100 µg/mL	Hexane	IRT-002S
3'-Chloroacetophenone	99-02-5	100 µg/mL	Hexane	IRT-003S
4'-Chloroacetophenone	99-91-2	100 µg/mL	Hexane	IRT-004S
Cyclohexanone	108-94-1	1 mg/mL	MeOH	M-554-04 *
Cyclohexanone-DNPH	1589-62-4	500 µg/mL	AcCN	AE-00046
		1 mg/mL	MeOH:AcCN	M-554-DNPH-04
		0.1 mg/mL	AcCN	M-8315-R-DNPH-07
1,1-Dichloro-2-propanone	513-88-2	5 mg/mL	Acetone	M-551B-6
2-Hexanone	591-78-6	100 µg/mL	MeOH	APP-9-118 *
		2.0 mg/mL	MeOH	APP-9-118-20X *
Isophorone	78-59-1	100 µg/mL	MeOH	APP-9-122
		1.0 mg/mL	MeOH	APP-9-122-10X
		1 mg/mL	MeOH	AS-E0052
Methyl ethyl ketone	78-93-3	100 µg/mL	MeOH	APP-9-129 *
		1 mg/mL	MeOH	APP-9-129-10X *
		2 mg/mL	MeOH	APP-9-129-20X *
		5 mg/mL	MeOH	AS-E0311 *
		10 mg/mL	Water	M-8015B/5031-18
4-Methyl-2-pentanone (Methyl isobutyl ketone)	108-10-1	10 mg/mL	Water	M-8015B/5031-19
		100 µg/mL	MeOH	APP-9-135
		2 mg/mL	MeOH	APP-9-135-20X
2-Pentanone	107-87-9	5 mg/mL	MeOH	AS-E0349
		10 mg/mL	Water	M-8015B/5031-22
1,1,1-Trichloro-2-propanone (1,1,1-Trichloroacetone)	918-00-3	5 mg/mL	Acetone	M-551B-8
		1 mg/mL	Acetone	AS-E1181
2',4',5'-Trifluoroacetophenone	129322-83-4	20 µg/mL	AcCN	M-556-SS
		2 mg/mL	AcCN	M-556-SS-100X

* ColdPAK required to maintain integrity of product.

Analytes by Functional Group

Phenols



Phenols EPA Methods: 558, 604, 642, 8040, 8041, 8085

Phenols				
Compound	CAS No.	Conc.	Matrix	Cat. No.
Bisphenol A (BPA)	80-05-7	1000 µg/mL	MeOH	M-1626-01S
4-Chloro-3-cresol (4-Chloro-3-methylphenol)	59-50-7	1.0 mg/mL	MeOH	M-8040-01
		100 µg/mL	MeOH	APP-9-041
2-Chlorophenol	95-57-8	100 mg	NEAT	A-013
		100 µg/mL	MeOH	APP-9-046
		5.0 mg/mL	MeOH	APP-9-046-50X
		2 mg/mL	CH ₂ Cl ₂	APP-9-046-D-20X
		5 mg/mL	MeOH	AS-E0022
3-Chlorophenol	108-43-0	100 mg	NEAT	A-014
		5 mg/mL	MeOH	AS-E0182
4-Chlorophenol	106-48-9	100 mg	NEAT	A-015
		5 mg/mL	MeOH	AS-E0183
2-Chlorophenol-d ₄	93951-73-6	0.2 mg/mL	CH ₂ Cl ₂	M-625-20
o-Chlorophenol	95-57-8	1.0 mg/mL	MeOH	M-8040-02
m-Cresol	108-39-4	100 µg/mL	CH ₂ Cl ₂	APP-9-050
		1 mg/mL	CH ₂ Cl ₂	APP-9-050-10X
		5 mg/mL	MeOH	AS-E0251
		1.0 mg/mL	MeOH	M-8040-03
o-Cresol	95-48-7	100 µg/mL	CH ₂ Cl ₂	APP-9-051
		2 mg/mL	CH ₂ Cl ₂	APP-9-051-20X
		1.0 mg/mL	MeOH	M-8040-04
		5 mg/mL	MeOH	AS-E0250
p-Cresol	106-44-5	100 µg/mL	CH ₂ Cl ₂	APP-9-052
		2 mg/mL	CH ₂ Cl ₂	APP-9-052-20X
		1.0 mg/mL	MeOH	M-8040-05
		5 mg/mL	MeOH	AS-E0252
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	1.0 mg/mL	MeOH	M-8040-06
2,4-Dibromophenol	615-58-7	1.6 µg/mL	IPA	M-8041-SS
		16 µg/mL	IPA	M-8041-SS-10X
		160 µg/mL	IPA	M-8041-SS-100X
		1 mg/mL	IPA	M-8041-SS-625X
2,3-Dichlorophenol	576-24-9	100 mg	NEAT	A-016
2,4-Dichlorophenol	120-83-2	100 mg	NEAT	A-017
		100 µg/mL	MeOH	APP-9-075
		1.0 mg/mL	MeOH	M-8040-07
		5 mg/mL	MeOH	APP-9-075-50X
		5 mg/mL	MeOH	AS-E0029
		1 mg/mL	MtBE	M-552A-R-06
2,5-Dichlorophenol	583-78-8	100 mg	NEAT	A-018
2,6-Dichlorophenol	87-65-0	100 mg	NEAT	A-019
		100 µg/mL	CH ₂ Cl ₂	APP-9-076
		1.0 mg/mL	MeOH	M-8040-08
		5 mg/mL	MeOH	APP-9-076-M-50X
3,4-Dichlorophenol	95-77-2	100 mg	NEAT	A-020
3,5-Dichlorophenol	591-35-5	100 mg	NEAT	A-021
2,4-Dimethylphenol	105-67-9	100 µg/mL	MeOH	APP-9-087
		5 mg/mL	MeOH	APP-9-087-50X
		1.0 mg/mL	MeOH	M-8040-09
2,4-Dimethylphenol-3,5,6-d ₃	93951-75-8	0.1 mg/mL	Acetone	AS-E0190
4,6-Dinitro-o-cresol	534-52-1	100 mg	NEAT	R-057N
		100 µg/mL	Toluene	R-057S
		1 mg/mL	MeOH	APP-9-090-10X
		5 mg/mL	MeOH	AS-E0058
2,4-Dinitrophenol	51-28-5	100 µg/mL	MeOH	APP-9-091
		1.0 mg/mL	MeOH	M-8040-10
		5 mg/mL	MeOH	APP-9-091-50X
2-Fluorophenol	367-12-4	0.1 mg/mL	Acetone	AS-E0193
		2 mg/mL	MeOH	CLP-AS-1
		0.2 mg/mL	CH ₂ Cl ₂	M-625-16
		2 mg/mL	CH ₂ Cl ₂	M-625-16-10X
2-Methyl-4,6-dinitrophenol	534-52-1	1.0 mg/mL	MeOH	M-8040-12
2-Nitrophenol (o-Nitrophenol)	88-75-5	100 mg	NEAT	R-051N
		100 µg/mL	Toluene	R-051S
		100 µg/mL	MeOH	APP-9-144
		1.0 mg/mL	MeOH	M-8040-13
		5.0 mg/mL	MeOH	APP-9-144-50X
3-Nitrophenol	554-84-7	5 mg/mL	MeOH	AS-E0662
4-Nitrophenol (p-Nitrophenol)	100-02-7	100 µg/mL	MeOH	APP-9-145
		1.0 mg/mL	MeOH	M-8040-14
		5 mg/mL	MeOH	APP-9-145-50X

Neats are as stated,
Solutions are 1 mL

Phenols & Nitrosamines

Phenols and Nitrosamines can react with the active sites on a column which can sometimes give inconsistent results from run to run. By saturating these sites, the problem should go away. To do this, run a standard that is between 2 to 5 times higher than your highest calibration point. This can be repeated if necessary until the problem is alleviated.

For Nonylphenols and
Octylphenols see page 261

Phenols continued on next page



Analytes by Functional Group

Phenols, Amines, Anilines and Amino Compounds

Phenols (continued)

Compound	CAS No.	Conc.	Matrix	Cat. No.
Pentachlorophenol	87-86-5	100 mg	NEAT	A-031
		100 µg/mL	MeOH	APP-9-176
		1 mg/mL	MeOH	APP-9-176-10X
		2 mg/mL	CH ₂ Cl ₂	APP-9-176-D-20X
		5 mg/mL	MeOH	AS-E0062
		25 µg/mL	CH ₂ Cl ₂	M-625C-2
		0.2 mg/mL	CH ₂ Cl ₂	M-625C-2-10X
		1.0 mg/mL	MeOH	M-8040-15
Pentachlorophenol- ¹³ C ₆	85380-74-1	0.1 mg/mL	Acetone	AS-E0191
Pentafluorophenol	771-61-9	0.2 mg/mL	CH ₂ Cl ₂	M-625-17
Phenol	108-95-2	100 µg/mL	CH ₂ Cl ₂	APP-9-179
		5 mg/mL	MeOH	AS-E0063
Phenol-d ₅	4165-62-2	0.1 mg/mL	Acetone	AS-E0189
		0.2 mg/mL	CH ₂ Cl ₂	M-625-18
		2 mg/mL	CH ₂ Cl ₂	M-625-18-10X
2,3,4,5-Tetrachlorophenol	4901-51-3	5 mg	NEAT	A-028
2,3,4,6-Tetrachlorophenol	58-90-2	10 mg	NEAT	A-029-10MG
		100 µg/mL	MeOH	APP-9-195
		1.0 mg/mL	MeOH	M-8040-17
2,3,5,6-Tetrachlorophenol	935-95-5	100 mg	NEAT	A-030
2,4,6-Tribromophenol	118-79-6	20 µg/mL	MtBE	M-8085-HERB-SS
		0.2 mg/mL	CH ₂ Cl ₂	M-625-19
		0.2 mg/mL	MeOH	M-604-SS
		2 mg/mL	MeOH	CLP-AS-3
		6 mg/mL	MeOH	CLP-LC-SS-2
2,3,4-Trichlorophenol	15950-66-0	100 mg	NEAT	A-022
2,3,5-Trichlorophenol	933-78-8	100 mg	NEAT	A-023
		5 mg/mL	MeOH	AS-E0222
2,3,6-Trichlorophenol	933-75-5	100 mg	NEAT	A-024
		1 mg/mL	MeOH	AS-E0181
2,4,5-Trichlorophenol	95-95-4	100 mg	NEAT	A-025
		0.1 mg/mL	Acetone	CLP-FC
		100 µg/mL	MeOH	APP-9-206
		1.0 mg/mL	MeOH	M-8040-18
		5 mg/mL	MeOH	AS-E0179
2,4,6-Trichlorophenol	88-06-2	100 mg	NEAT	A-026
		100 µg/mL	MeOH	APP-9-207
		5 mg/mL	MeOH	APP-9-207-50X
		0.1 µg/mL	Acetone	M-1618-SE
		0.1 mg/mL	Acetone	M-1600-SPE
		1 mg/mL	MtBE	M-552A-7
		1.0 mg/mL	MeOH	M-8040-19
3,4,5-Trichlorophenol	609-19-8	10 mg	NEAT	A-027
		1 mg/mL	MeOH	M-1653-IS
		1 mg/mL	Acetone	M-1653-IS-R

Neats are as stated,
Solutions are 1 mL

Amines, Anilines and Amino Compounds EPA Methods: 605, 607, 620, 625, 1666, 8015, 8095, 8131, 8325

Amines, Anilines and other Amino Compounds

Compound	CAS No.	Conc.	Matrix	Cat. No.
2-Amino-4-nitrotoluene	99-55-8	100 µg/mL	AcCN	RAC-03
		1 mg/mL	AcCN	RAC-03-10X
p-Aminoazobenzene	60-09-3	100 µg/mL	AcCN	RAC-21
		1000 µg/mL	AcCN	RAC-21-10X
o-Aminoazotoluene	97-56-3	100 µg/mL	AcCN	RAC-01
		1 mg/mL	AcCN	RAC-01-10X
2-Aminobiphenyl	90-41-5	10 mg	NEAT	R-062N
		100 µg/mL	Toluene	R-062S
		100 µg/mL	AcCN	RAC-22
		1000 µg/mL	AcCN	RAC-22-10X
4-Aminobiphenyl	92-67-1	10 mg	NEAT	R-063N
		100 µg/mL	Toluene	R-063S
		100 µg/mL	CH ₂ Cl ₂	APP-9-011
		100 µg/mL	AcCN	RAC-02
		1 mg/mL	AcCN	RAC-02-10X
		1 mg/mL	MeOH	AS-E0578
Aniline	62-53-3	100 mg	NEAT	L-001N
		100 µg/mL	MeOH	APP-9-012
		1 mg/mL	MeOH	APP-9-012-10X
		5 mg/mL	MeOH	AS-E0542
Aniline-d ₅	4165-61-1	0.2 mg/mL	CH ₂ Cl ₂	M-625-01
		2 mg/mL	CH ₂ Cl ₂	M-625-01-10X
o-Anisidine	90-04-0	100 µg/mL	AcCN	RAC-23
		1000 µg/mL	AcCN	RAC-23-10X

Analytes by Functional Group

Amines, Anilines and other Amino Compounds



Amines, Anilines and other Amino Compounds (continued)

Compound	CAS No.	Conc.	Matrix	Cat. No.
Benzidine	92-87-5	50 µg/mL	CH ₂ Cl ₂	M-625C-1
		2 mg/mL	CH ₂ Cl ₂	M-625C-1-40X
		100 µg/mL	AcCN	RAC-04
		1 mg/mL	AcCN	RAC-04-10X
Benzidine (as dihydrochloride)	531-85-1	1 mg/mL	MeOH	AS-E0005
2-Bromo-4,6-dinitroaniline	1817-73-8	100 mg	NEAT	L-017N
4-Bromoaniline	106-40-1	100 mg	NEAT	L-007N
4-Chloro-2-nitroaniline	89-63-4	100 mg	NEAT	L-013N
2-Chloro-4,6-dinitroaniline	3531-19-9	100 mg	NEAT	L-015N
2-Chloro-4-nitroaniline	121-87-9	100 mg	NEAT	L-012N
2-Chloroaniline	95-51-2	100 mg	NEAT	L-002N
3-Chloroaniline	108-42-9	100 mg	NEAT	L-003N
4-Chloroaniline (p-Chloroaniline)	106-47-8	100 mg	NEAT	L-004N
		100 µg/mL	AcCN	RAC-05
		1 mg/mL	AcCN	RAC-05-10X
		100 µg/mL	MeOH	APP-9-038
3-Chloro-o-toluidine	87-60-5	5 mg/mL	MeOH	AS-E0305
		100 µg/mL	AcCN	RAC-24
		1000 µg/mL	AcCN	RAC-24-10X
4-Chloro-o-toluidine	95-69-2	100 µg/mL	AcCN	RAC-06
		1 mg/mL	AcCN	RAC-06-10X
p-Cresidine	120-71-8	100 µg/mL	AcCN	RAC-07
		1.0 mg/mL	AcCN	RAC-07-10X
2,4-Diaminoaniline sulfate hydrate	123333-56-2	100 µg/mL	Pyridine	RAC-08
		1 mg/mL	Pyridine	RAC-08-10X
3,3'-Diaminobenzidine	91-95-2	50 mg	NEAT	R-074N
		100 µg/mL	Toluene	R-074S
4,4'-Diaminodiphenylmethane (4,4'-Methylenedianiline)	101-77-9	100 mg	NEAT	R-077N
		100 µg/mL	Toluene	R-077S
		100 µg/mL	AcCN	RAC-09
		1 mg/mL	AcCN	RAC-09-10X
		100 mg	NEAT	R-078N
2,4-Diaminotoluene	95-80-7	100 µg/mL	Toluene	R-078S
		100 µg/mL	AcCN	RAC-10
		1 mg/mL	AcCN	RAC-10-10X
		1 mg/mL	MeOH	AS-E0932
		100 mg	NEAT	L-016N
2,6-Dibromo-4-nitroaniline	827-94-1	100 mg	NEAT	L-014N
2,6-Dichloro-4-nitroaniline	99-30-9	100 mg	NEAT	L-005N
3,4-Dichloroaniline	95-76-1	100 mg	NEAT	L-005N
3,3'-Dichlorobenzidine	91-94-1	50 mg	NEAT	R-075N
		100 µg/mL	MeOH	APP-9-067
		1 mg/mL	MeOH	AS-E0026
		100 µg/mL	Toluene	R-075S
		100 µg/mL	AcCN	RAC-11
		1 mg/mL	AcCN	RAC-11-10X
		2 mg/mL	MeOH	Z-014F-2
		50 mg	NEAT	R-076N
		100 µg/mL	Toluene	R-076S
3,3'-Dimethoxybenzidine	119-90-4	100 µg/mL	AcCN	RAC-12
		1 mg/mL	AcCN	RAC-12-10X
		100 µg/mL	AcCN	RAC-14
3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	1 mg/mL	AcCN	RAC-14-10X
		100 µg/mL	AcCN	RAC-14
4-Dimethylaminoazobenzene	60-11-7	10 mg	NEAT	R-079N
		100 µg/mL	Toluene	R-079S
2,6-Dimethylaniline	87-62-7	100 mg	NEAT	L-018N
		100 µg/mL	AcCN	L-018S-CN
3,3'-Dimethylbenzidine	119-93-7	100 µg/mL	CH ₂ Cl ₂	APP-9-085
		2.0 mg/mL	CH ₂ Cl ₂	APP-9-085-20X
		100 µg/mL	AcCN	RAC-13
		1 mg/mL	AcCN	RAC-13-10X
a,a-Dimethylphenethylamine	122-09-8	100 µg/mL	CH ₂ Cl ₂	APP-9-086
		2.0 mg/mL	CH ₂ Cl ₂	APP-9-086-20X
2,4-Dinitroaniline	97-02-9	100 mg	NEAT	L-011N
Diphenylamine	122-39-4	100 µg/mL	CH ₂ Cl ₂	APP-9-097
		1 mg/mL	MeOH	M-620
		5 mg/mL	MeOH	AS-E0263
Ethylenediamine	107-15-3	1 mg/mL	MeOH	AS-E0358
4-Fluoroaniline	371-40-4	0.2 mg/mL	CH ₂ Cl ₂	M-625-08
		2 mg/mL	CH ₂ Cl ₂	M-625-08-10X
2-Methyl-4-nitroaniline	99-52-5	100 µg/mL	AcCN	M-8095-SS-02
Methylamine	74-89-5	2500 µg/mL	Water	M-1666A-DI-R-ADD1
4,4'-Methylenebis(2-chloroaniline)	101-14-4	50 mg	NEAT	R-080N
		100 µg/mL	Toluene	R-080S
		100 µg/mL	AcCN	RAC-15
		1 mg/mL	AcCN	RAC-15-10X
		5 mg/mL	MeOH	AS-E0322
2-Naphthylamine	91-59-8	100 µg/mL	AcCN	RAC-16
		1 mg/mL	AcCN	RAC-16-10X

Neats are as stated,
Solutions are 1 mL

Amines, Anilines and
other Amino compounds
continued on next page



Analytes by Functional Group

Amines, Anilines and other Amino Compounds

Amines, Anilines and other Amino Compounds (continued)

Neats are as stated,
Solutions are 1 mL

Compound	CAS No.	Conc.	Matrix	Cat. No.
2-Nitroaniline	88-74-4	100 mg	NEAT	L-008N
		100 mg	NEAT	R-054N
		100 µg/mL	Toluene	R-054S
3-Nitroaniline	99-09-2	100 mg	NEAT	L-009N
		100 µg/mL	Toluene	R-055S
4-Nitroaniline	100-01-6	100 mg	NEAT	L-010N
		100 µg/mL	Toluene	R-056S
m-Nitroaniline	99-09-2	100 µg/mL	CH ₂ Cl ₂	APP-9-141
o-Nitroaniline	88-74-4	100 µg/mL	CH ₂ Cl ₂	APP-9-140
		5 mg/mL	MeOH	AS-E0324
p-Nitroaniline	100-01-6	100 µg/mL	CH ₂ Cl ₂	APP-9-142
		5 mg/mL	MeOH	AS-E0342
		5 mg/mL	AcCN	AS-E0392
5-Nitro-o-toluidine	99-55-8	100 µg/mL	CH ₂ Cl ₂	APP-9-156
		5 mg/mL	MeOH	AS-E0344
N-Nitrosodiethylamine	55-18-5	100 µg/mL	CH ₂ Cl ₂	APP-9-148
		2 mg/mL	CH ₂ Cl ₂	APP-9-148-20X
		5 mg/mL	MeOH	AS-E0334
N-Nitrosodimethylamine	62-75-9	100 µg/mL	CH ₂ Cl ₂	APP-9-149
		1 mg/mL	MeOH	APP-9-149-M-10X
		5 mg/mL	MeOH	AS-E0059
N-Nitrosodi-n-butylamine	924-16-3	100 µg/mL	CH ₂ Cl ₂	APP-9-147
		2 mg/mL	CH ₂ Cl ₂	APP-9-147-20X
		0.5 mg/mL	Water	M-8015B/5031-20
N-Nitrosodi-n-propylamine	621-64-7	100 µg/mL	CH ₂ Cl ₂	APP-9-151
		2.5 mg/mL	CH ₂ Cl ₂	APP-9-151-25X
		5 mg/mL	MeOH	AS-E0061
N-Nitrosodiphenylamine	86-30-6	100 µg/mL	CH ₂ Cl ₂	APP-9-150
		1.0 mg/mL	MeOH	APP-9-150-M-10X
		5 mg/mL	MeOH	AS-E0060
N-Nitrosomethylethylamine	10595-95-6	100 µg/mL	CH ₂ Cl ₂	APP-9-152
N-Nitroso-N-methyl ethylamine		1 mg/mL	MeOH	AS-E0974
1-Nitrosopiperidine	100-75-4	5 mg/mL	MeOH	AS-E0458
4,4'-Oxydianiline	101-80-4	100 µg/mL	AcCN	RAC-17
		1 mg/mL	AcCN	RAC-17-10X
		100 µg/mL	MeOH	APP-9-180
p-Phenylenediamine	106-50-3	1 mg/mL	AcCN	AS-E0275
		2 mg/mL	MeOH	APP-9-180-20X
		1 mg/mL	MeOH	AS-E0657
1-Propanamine	107-10-8	100 µg/mL	MeOH	APP-9-186-M
Pyridine	110-86-1	2 mg/mL	MeOH	APP-9-186-M-20X
		5 mg/mL	MeOH	AS-E0271
		10 mg/mL	Water	M-8015B/5031-26
		0.2 mg/mL	CH ₂ Cl ₂	M-625-15
Pyridine-d ₅	7291-22-7	2.0 mg/mL	CH ₂ Cl ₂	M-625-15-10X
		1 mg/mL	AcCN	RAC-IS
3,3',5,5'-Tetramethylbenzidine	54827-17-7	1 mg/mL	Ethyl acetate	RAC-IS-EA
		1 mg/mL	AcCN	RAC-18
4,4'-Thiodianiline	139-65-1	100 µg/mL	AcCN	RAC-18-10X
		1 mg/mL	AcCN	RAC-19
o-Toluidine	95-53-4	100 µg/mL	MeOH	APP-9-199
		2 mg/mL	MeOH	AS-E0503
		100 µg/mL	AcCN	RAC-19
		1 mg/mL	AcCN	RAC-19-10X
		10 mg/mL	Water	M-8015B/5031-27
2,4,5-Trichloroaniline	636-30-6	100 mg	NEAT	L-006N
2,4,5-Trimethylaniline	137-17-7	100 µg/mL	AcCN	RAC-20
		1 mg/mL	AcCN	RAC-20-10X



Thousands of Standards, just a click away

AccuStandard.com

Analytes by Functional Group

Ethers, Halo Ethers & Haloacetic Acids



Ether EPA Methods: 601, 8150

Ethers

Compound	CAS No.	Conc.	Matrix	Cat. No.
bis(2-Chloroethyl)ether	111-44-4	4.0 mg/mL	MeOH	APP-9-027-40X
2-Chloroethylvinyl ether	110-75-8	2 mg/mL	MeOH	M-601C-10X
2,4-Dichlorophenyl-3-methyl-4-nitrophenyl ether	42488-57-3	1.0 mg/mL	Isooctane	E-020S
Diethyl ether	60-29-7	10 mg/mL	Water	M-8015B/5031-09
Dinoseb methyl ether	6099-79-2	0.2 mg/mL	Hexane	M-8150-08
p-Dioxane	123-91-1	100 µg/mL	MeOH	APP-9-096
		1 mg/mL	MeOH	APP-9-096-10X
		10 mg/mL	MeOH	AS-E0480
1,4-Dioxane	123-91-1	10 mg/mL	Water	M-8015B/5031-10
MtBE	1634-04-4	0.2 mg/mL	MeOH	S-078
		2 mg/mL	MeOH	S-078-10X
TAME	994-05-8	0.2 mg/mL	MeOH	S-1019

Neats are as stated,
Solutions are 1 mL

Halo Ethers

Compound	CAS No.	Conc.	Matrix	Cat. No.
2-Chlorophenyl-4-nitrophenyl ether	209-61-4	1 mg/mL	Isooctane	E-005S
3-Chlorophenyl-4-nitrophenyl ether	2303-23-3	1 mg/mL	Isooctane	E-006S
4-Chlorophenyl-4-nitrophenyl ether	1836-74-4	1 mg/mL	Isooctane	E-007S
2,4-Dibromophenyl-4-nitrophenyl ether	2671-93-4	1 mg/mL	Isooctane	E-004S
2,3-Dichlorophenyl-4-nitrophenyl ether	82239-20-1	1 mg/mL	Isooctane	E-008S
2,5-Dichlorophenyl-4-nitrophenyl ether	391-48-7	1 mg/mL	Isooctane	E-010S
2,6-Dichlorophenyl-4-nitrophenyl ether	2093-28-9	1 mg/mL	Isooctane	E-011S
3,5-Dichlorophenyl-4-nitrophenyl ether	21105-77-1	1 mg/mL	Isooctane	E-012S
2,4-Dichlorophenyl-4-nitrophenyl ether	1836-75-5	1 mg/mL	Isooctane	E-009S
3,4-Dichlorophenyl-4-nitrophenyl ether	22532-80-5	1 mg/mL	Isooctane	E-013S
4-Nitrophenyl phenyl ether	620-88-2	1 mg/mL	Isooctane	E-003S
2,3,5-Trichlorophenyl-4-nitrophenyl ether	142022-59-1	1 mg/mL	Isooctane	E-015S
2,3,6-Trichlorophenyl-4-nitrophenyl ether	142022-58-0	1 mg/mL	Isooctane	E-016S
2,3,4-Trichlorophenyl-4-nitrophenyl ether	142022-61-5	1 mg/mL	Isooctane	E-014S
2,4,5-Trichlorophenyl-4-nitrophenyl ether	22532-68-9	1 mg/mL	Isooctane	E-017S
2,4,6-Trichlorophenyl-4-nitrophenyl ether	1836-77-7	1 mg/mL	Isooctane	E-018S
3,4,5-Trichlorophenyl-4-nitrophenyl ether		1 mg/mL	Isooctane	E-019S

Haloacetic Acids EPA Methods: 552A, 552.1, 522.2, 515

Haloacetic Acids

Compound	CAS No.	Conc.	Matrix	Cat. No.
Bromoacetic acid	79-08-3	1 mg/mL	MtBE	M-552A-1
Bromochloroacetic acid	5589-96-8	40 µg/mL	MtBE	M-552.2A-01
		1 mg/mL	MtBE	M-552A-R-02
Bromodichloroacetic acid	71133-14-7	40 µg/mL	MtBE	M-552.2A-02
Chloroacetic acid	79-11-8	1 mg/mL	MtBE	M-552A-2
Chlorodibromoacetic acid	5278-95-5	100 µg/mL	MtBE	M-552.2A-03
Dibromoacetic acid	631-64-1	20 µg/mL	MtBE	M-552.2A-05
		1 mg/mL	MtBE	M-552A-5
Dichloroacetic acid	79-43-6	60 µg/mL	MtBE	M-552.2A-06
		1 mg/mL	MtBE	M-552A-3
2,4-Dichlorophenylacetic acid	19719-28-9	2 µg/mL	Acetone	M-1618-SA
2,4-Dichlorophenylacetic methyl ester	55954-23-9	0.1 mg/mL	MtBE	M-515-SS
		5 mg/mL	MtBE	M-515-SS-50X
Methyl bromoacetate	96-32-2	40 µg/mL	MtBE	M-552.2-02
		200 µg/mL	MeOH	M-552.1-02
Methyl bromochloroacetate	20428-74-4	40 µg/mL	MtBE	M-552.2-03
		200 µg/mL	MeOH	M-552.1-03
		1 mg/mL	MtBE	M-552-R-03
Methyl bromodichloroacetate	20428-76-6	40 µg/mL	MtBE	M-552.2-04
Methyl chloroacetate	96-34-4	60 µg/mL	MtBE	M-552.2-05
		300 µg/mL	MeOH	M-552.1-04
		1 mg/mL	MtBE	M-552-R-04
Methyl chlorodibromoacetate	20428-75-5	100 µg/mL	MtBE	M-552.2-06
Methyl dibromoacetate	6482-26-4	20 µg/mL	MtBE	M-552.2-07
		100 µg/mL	MeOH	M-552.1-05
Methyl dichloroacetate	116-54-1	60 µg/mL	MtBE	M-552.2-08
		300 µg/mL	MeOH	M-552.1-06
Methyl tribromoacetate	3222-05-7	200 µg/mL	MtBE	M-552.2-09 *
Methyl trichloroacetate	598-99-2	20 µg/mL	MtBE	M-552.2-10
		100 µg/mL	MeOH	M-552.1-07
Monobromoacetic acid	79-08-3	40 µg/mL	MtBE	M-552.2A-07
Monochloroacetic acid	79-11-8	60 µg/mL	MtBE	M-552.2A-08
Tribromoacetic acid	75-96-7	200 µg/mL	MtBE	M-552.2A-09
Trichloroacetic acid	76-03-9	20 µg/mL	MtBE	M-552.2A-10

* ColdPAK required to maintain integrity of product.



Analytes by Functional Group

Phthalates

The Consumer Products Safety Commission (CPSC) has proposed banning the use of several phthalates in materials for children's toys. In 2008, a congressional edict banned dibutyl, n-butyl benzyl and di-2-ethylhexyl (DEHP) phthalates as potential health risks.

Diisononyl (DINP), di-n-octyl (DNOP) and diisodecyl (DIDP) phthalates also were banned on an interim basis. CPSC's advisory panel now recommends a permanent ban on DINP, but recommends the ban on DNOP and DIDP should be lifted. In addition, the panel is considering a ban on diisobutyl, di-n-pentyl, di-n-hexyl and dicyclohexyl phthalates.

Phthalates EPA Methods: 506, 606, 8060, 8061

Listed in 4 groups, Phthalates, Monophthalates, Deuterated Phthalates and Technical Mixtures



Phthalates

Compound	CAS No.	Conc.	Matrix	Cat. No.
Benzyl butyl phthalate	85-68-7	100 mg	NEAT	ALR-082N
		100 µg/mL	MeOH	ALR-082S
		5 mg/mL	MeOH	AS-E0065
bis(2-n-Butoxyethyl)phthalate	117-83-9	100 mg	NEAT	J-112
bis(2-Ethoxyethyl)phthalate	605-54-9	100 mg	NEAT	J-111
bis(2-Ethylhexyl)phthalate	117-81-7	100 mg	NEAT	ALR-097N
		100 µg/mL	MeOH	ALR-097S
		1 mg/mL	MeOH	APP-9-029-10X
bis(2-Methoxyethyl)phthalate	117-82-8	100 mg	NEAT	J-106
bis(4-Methyl-2-pentyl)phthalate	146-50-9	100 mg	NEAT	J-109
2-Butoxy-2-oxoethyl butyl phthalate	85-70-1	100 mg	NEAT	J-115
Diallyl phthalate	131-17-9	100 mg	NEAT	J-002
Diamyl phthalate	131-18-0	100 mg	NEAT	ALR-098N
		0.1 mg/mL	EtOAc	ALR-098S
Dibenzyl phthalate	523-31-9	100 mg	NEAT	J-104
Dibutyl phthalate	84-74-2	100 mg	NEAT	J-003
		100 µg/mL	MeOH	APP-9-063
		1 mg/mL	MeOH	APP-9-063-10X
		5 mg/mL	MeOH	AS-E0066
Dicyclohexyl phthalate	84-61-7	100 mg	NEAT	J-004
		100 µg/mL	MeOH	ALR-099S
		1 mg/mL	AcCN	AS-E0318
Didodecyl phthalate	2432-90-8	100 mg	NEAT	PHTH-018N
		100 µg/mL	MeOH	PHTH-018S
Diethyl phthalate	84-66-2	100 mg	NEAT	J-005
		100 µg/mL	MeOH	APP-9-081
		1 mg/mL	MeOH	APP-9-081-10X
		5 mg/mL	MeOH	AS-E0068
Dihexyl phthalate	84-75-3	100 mg	NEAT	ALR-100N
		100 µg/mL	MeOH	ALR-100S
Diisobutyl phthalate	84-69-5	100 mg	NEAT	J-113
Diisopentyl phthalate (Diisoamyl phthalate)	605-50-5	100 mg	NEAT	J-127
Diisopropyl phthalate	605-45-8	100 mg	NEAT	PHTH-019N
		100 µg/mL	MeOH	PHTH-019S
Dimethyl phthalate	131-11-3	100 mg	NEAT	J-010
		100 µg/mL	MeOH	APP-9-088
		1 mg/mL	MeOH	APP-9-088-10X
		5 mg/mL	MeOH	AS-E0069
		0.1 mg/mL	EtOAc	M-8032-IS
Di-n-heptyl phthalate	3648-21-3	100 mg	NEAT	PHTH-020N
		100 µg/mL	MeOH	PHTH-020S
Di-n-octyl phthalate	117-84-0	100 mg	NEAT	J-011
		100 µg/mL	MeOH	APP-9-095
		5 mg/mL	MeOH	AS-E0067
Di-n-propyl phthalate	131-16-8	100 mg	NEAT	J-100
Diphenyl phthalate	84-62-8	100 mg	NEAT	J-013
Diundecyl phthalate	3648-20-2	100 mg	NEAT	PHTH-021N
		100 µg/mL	MeOH	PHTH-021S
Isophthalates				
Dimethyl isophthalate	1459-93-4	100 mg	NEAT	J-009
Diphenyl isophthalate	744-45-6	100 mg	NEAT	J-012
Terephthalates				
bis(2-Ethylhexyl) terephthalate	6422-86-2	100 mg	NEAT	J-121
Diethyl terephthalate	636-09-9	100 mg	NEAT	J-123
Dimethyl terephthalate	120-61-6	100 mg	NEAT	J-101

Neats are as stated,
Solutions are 1 mL

Phthalate Standards Reference Guide



Guide includes added
technical & physical
information

Request or download
Reference Guide at
AccuStandard.com

Analytes by Functional Group

Phthalates



Phthalates (continued)

Compound	CAS No.	Conc.	Matrix	Cat. No.
Monophthalates				
Monobenzyl phthalate (mBzP) NEW	2528-16-7	100 mg	NEAT	ALR-134N
		100 µg/mL	AcCN	ALR-134S-CN
Monobutyl phthalate (mBP)	131-70-4	100 mg	NEAT	ALR-135N
		100 µg/mL	AcCN	ALR-135S-CN
Monocyclohexyl phthalate NEW	7517-36-4	100 mg	NEAT	ALR-178N
		100 µg/mL	AcCN	ALR-178S-CN
Monoethyl phthalate (mEP)	2306-33-4	100 mg	NEAT	ALR-137N
		100 µg/mL	AcCN	ALR-137S-CN
Monoethylhexyl phthalate (mEHP)	4376-20-9	100 mg	NEAT	ALR-138N
		100 µg/mL	AcCN	ALR-138S-CN
Mono-2-heptyl phthalate NEW		100 mg	NEAT	ALR-143N
		100 µg/mL	AcCN	ALR-143S-CN
Monohexyl phthalate NEW	24539-57-9	100 mg	NEAT	ALR-175N
		100 µg/mL	AcCN	ALR-175S-CN
Monoisobutyl phthalate NEW	30833-53-5	100 mg	NEAT	ALR-176N
		100 µg/mL	AcCN	ALR-176S-CN
Monoisononyl phthalate NEW		100 mg	NEAT	ALR-142N
		100 µg/mL	AcCN	ALR-142S-CN
Mixture of C9 Isomers				
Monoisopropyl phthalate NEW	35118-50-4	100 mg	NEAT	ALR-179N
		100 µg/mL	AcCN	ALR-179S-CN
Monomethyl phthalate	4376-18-5	100 mg	NEAT	ALR-139N
		100 µg/mL	AcCN	ALR-139S-CN
Monooctyl phthalate NEW	5393-19-1	100 mg	NEAT	ALR-141N
		100 µg/mL	AcCN	ALR-141S-CN
Mono-n-pentyl phthalate NEW	24539-56-8	100 mg	NEAT	ALR-177N
		100 µg/mL	AcCN	ALR-177S-CN
Deuterated Phthalates				
Dibenzylphthalate-d ₄	1015854-62-2	5 mg	NEAT	PHTH-D4-001N
		100 µg/mL	MeOH	PHTH-D4-001S
Dicyclohexyl phthalate-3,4,5,6-d ₄	358731-25-6	5 mg	NEAT	PHTH-D4-004N
		100 µg/mL	MeOH	PHTH-D4-004S
Diethyl phthalate-3,4,5,6-d ₄	93952-12-6	5 mg	NEAT	PHTH-D4-005N
		100 µg/mL	MeOH	PHTH-D4-005S
Di-iso-butyl phthalate-3,4,5,6-d ₄	358730-88-8	5 mg	NEAT	PHTH-D4-003N
		100 µg/mL	MeOH	PHTH-D4-003S
Dimethyl phthalate-3,4,5,6-d ₄	93951-89-4	5 mg	NEAT	PHTH-D4-007N
		100 µg/mL	MeOH	PHTH-D4-007S
Di-n-butyl phthalate-d ₄	93952-11-5	5 mg	NEAT	PHTH-D4-002N
		100 µg/mL	MeOH	PHTH-D4-002S
Di-n-hexyl phthalate-3,4,5,6-d ₄	1015854-55-3	5 mg	NEAT	PHTH-D4-006N
		100 µg/mL	MeOH	PHTH-D4-006S
Di-n-octyl phthalate-3,4,5,6-d ₄	93952-13-7	5 mg	NEAT	PHTH-D4-008N
		100 µg/mL	MeOH	PHTH-D4-008S
Di-n-pentyl phthalate-3,4,5,6-d ₄	358730-89-9	5 mg	NEAT	PHTH-D4-009N
		100 µg/mL	MeOH	PHTH-D4-009S
Di-n-propyl phthalate-3,4,5,6-d ₄	358731-29-0	5 mg	NEAT	PHTH-D4-010N
		100 µg/mL	MeOH	PHTH-D4-010S
bis(2-Ethylhexyl)phthalate-3,4,5,6-d ₄	93951-87-2	5 mg	NEAT	PHTH-D4-011N
		100 µg/mL	MeOH	PHTH-D4-011S
Set includes above 11 Deuterated Phthalates				
	NEAT Set		PHTH-D4N-SET	11 x 5 mg
	SOLUTION Set		PHTH-D4S-SET	11 x 1 mL

Neats are as stated,
Solutions are 1 mL



Phthalates

Phthalates continued on
next page

Analytes by Functional Group

Phthalates

Phthalates (continued)

Compound	CAS No.	Conc.	Matrix	Cat. No.
Phthalates - Technical Mixtures				
Benzyl 2-ethylhexyl phthalate	27215-22-1	100 mg	NEAT	ALR-165N
		100 µg/mL	MeOH	ALR-165S
n-Butyl benzyl phthalate NEW	85-68-7	10 mg	NEAT	PHTH-014N
		100 µg/mL	MeOH	PHTH-014S
Butyl cyclohexyl phthalate	84-64-0	100 mg	NEAT	J-122
n-Butyl isobutyl phthalate NEW	17851-53-5	10 mg	NEAT	PHTH-013N
		100 µg/mL	MeOH	PHTH-013S
Butyl octyl phthalate	84-78-6	100 mg	NEAT	J-001
Decyl octyl phthalate NEW	119-07-3	10 mg	NEAT	PHTH-012N
		100 µg/mL	MeOH	PHTH-012S
Didecyl phthalate NEW	84-77-5	100 mg	NEAT	J-120
Diisodecyl phthalate	26761-40-0	100 mg	NEAT	ALR-101N
		100 µg/mL	MeOH	ALR-101S
Diisoheptyl phthalate	71888-89-6	50 mg	NEAT	PHTH-017N
		100 µg/mL	MeOH	PHTH-017S
Diisohexyl phthalate	68515-50-4	100 mg	NEAT	J-007
Diisononyl phthalate (C8 to C10 Isomers)	68515-48-0	100 mg	NEAT	ALR-102N
		100 µg/mL	MeOH	ALR-102S
Diisooctyl phthalate (C8 Isomers)	27554-26-3	100 mg	NEAT	ALR-103N
		100 µg/mL	MeOH	ALR-103S
Dinonyl phthalate NEW	84-76-4	100 mg	NEAT	J-105
Hexyl-2-ethylhexyl phthalate NEW	75673-16-4	100 mg	NEAT	J-016
Isobutyl benzyl phthalate NEW	72170-45-7	10 mg	NEAT	PHTH-015N
		100 µg/mL	MeOH	PHTH-015S
Isobutyl cyclohexyl phthalate	5334-09-8	100 mg	NEAT	J-014
Pentyl isopentyl phthalate NEW	776297-69-9	10 mg	NEAT	PHTH-016N
		100 µg/mL	MeOH	PHTH-016S
n-Octyl n-decyl phthalate	119-07-3	100 mg	NEAT	J-015

Neats are as stated,
Solutions are 1 mL





Search by

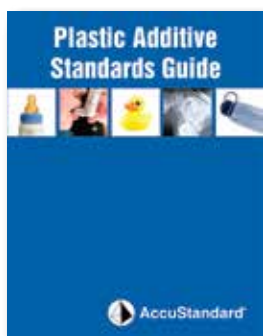
Functional Group

✓ **Application**

EPA Method

Methods by Application:

Many different industries have specific needs for reference standards. In order to make it easy for chemists to find products applicable to their analyses, AccuStandard has created industry specific listings for these different applications.



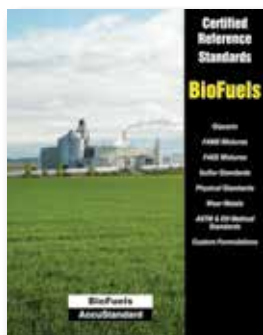
Analytes by Application	81-111
Explosives UPDATED	82-85
Explosives and their Metabolites	82-83
EPA Methods 8330, 529 and 8095	83-84
DIN 38407-21	85
Gun Surveillance Standards NEW	85
Inorganic ICP Standards for Gun Shot Residue NEW	85
Organic Compounds for Firearm Discharge Analysis NEW	85
Fuels & Hydrocarbons	307-310
Plastic Additives 20 NEW	86-92
Bisphenol Analog NEW	92
Imidazoles (Caramel coloring) NEW	92
Melamine	92
EFSA	92
Food Analytes (Food Constituents, Lipids)	93-97
Methyl Esters	93-94
Glycerides	93
AOCS Methods	95
FAMES	96
Vitamins and Preservatives	97
Allergens (Personal Care Products)	98-103
Dyes	104-106
Perfluorooctanoic Acids and Salts (PFOA, PFOS)	107
Odor Standards	107
Irritant Standards	107
Refrigerants	108
Qualitative Analysis Kits	109-111

Thousands of Standards,

just a click away



AccuStandard.com





Explosives

Explosive standards are traditionally used for the remediation of soil and water in locations where explosives have been stored. These same standards are now being used to calibrate baggage screening detectors at airports and other secure locations (embassies and other government buildings). They also are used by police departments and the military in K-9 odor recognition training for explosives.

AccuStandard has working relationships with both government and private sector K-9 training facilities and laboratories which provide valuable information and insight into the latest developments in explosives.

To assist in all aspects of explosive detection and analysis, AccuStandard synthesizes an array of explosives as well as metabolites, degradation products and raw materials. AccuStandard is the only U.S. commercial source for TATP, HMTD, HMDD and HNS.

In addition to catalog items, we offer special formulations for EPA method and customer-specific applications.

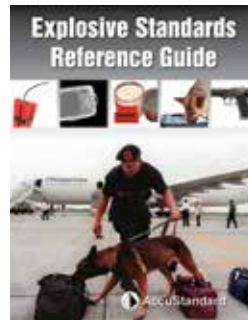
**Widest selection of
Explosives and their
Metabolites**

**EXCLUSIVELY
from
AccuStandard**

**HMTD,
TATP &
HNS**

Matrix Key

AcCN:MeOH in (50:50 ratio) DMF Dimethyl formamide
AcCN Acetonitrile EtOH Ethanol
MeOH Methanol



**Guide includes added
technical & physical
information
Available on website.**

♦ TNT Metabolites

Explosives

Compound	CAS No.	Conc.	Matrix	Cat. No.	1 mL
2-Amino-4,6-dinitrotoluene ♦	35572-78-2	1 mg/mL	AcCN:MeOH (50:50)	M-8330-13	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-13-0.1X	
4-Amino-2,6-dinitrotoluene ♦	19406-51-0	1 mg/mL	AcCN:MeOH (50:50)	M-8330-14	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-14-0.1X	
Ammonium picrate	131-74-8	0.1 mg/mL	AcCN	M-8330-ADD-27	
DEGDN	693-21-0	100 µg/mL	AcCN:MeOH (50:50)	M-8330-ADD-36	
1,2-Diaminopropane	78-90-0	0.1 mg/mL	MeOH	M-8330-ADD-9	
2,4-Diamino-6-nitrotoluene ♦	6629-29-4	0.1 mg/mL	AcCN	M-8330-ADD-12	
2,6-Diamino-4-nitrotoluene ♦	59229-75-3	0.1 mg/mL	AcCN	M-8330-ADD-13	
Diazodinitrophenol	4682-03-5	0.1 mg/mL	AcCN	M-8330-ADD-48	
		1 mg/mL	AcCN	M-8330-ADD-48-10X	
2,3-Dimethyl-2,3-dinitrobutane (DMNB)	3964-18-9	100 µg/mL	AcCN	M-8330-ADD-21	
3,5-Dinitroaniline	618-87-1	0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-ADD-4	
1,2-Dinitrobenzene	528-29-0	1 mg/mL	MeOH	M-8330-SS	
1,3-Dinitrobenzene	99-65-0	1 mg/mL	AcCN:MeOH (50:50)	M-8330-01	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-01-0.1X	
1,2-Dinitroglycerin	621-65-8	100 µg/mL	AcCN:MeOH (50:50)	M-8330-ADD-33	
1,3-Dinitroglycerin	623-87-0	100 µg/mL	AcCN:MeOH (50:50)	M-8330-ADD-34	
2,4-Dinitrotoluene ♦	121-14-2	1 mg/mL	AcCN:MeOH (50:50)	M-8330-02	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-02-0.1X	
2,6-Dinitrotoluene ♦	606-20-2	1 mg/mL	AcCN:MeOH (50:50)	M-8330-03	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-03-0.1X	
3,4-Dinitrotoluene	610-39-9	1 mg/mL	MeOH	M-8330-IS	
3,5-Dinitrotoluene ♦	618-85-9	100 µg/mL	AcCN:MeOH (50:50)	M-8330-ADD-39	
Dipentaerythritol hexanitrate NEW	13184-80-0	100 µg/mL	MeOH	M-8330-ADD-43	
EGDN	628-96-6	0.1 mg/mL	AcCN	M-8330-ADD-5	
Erythritol tetranitrate (ETN)	7297-25-8	0.1 mg/mL	AcCN	M-8330-ADD-47	
		1 mg/mL	AcCN	M-8330-ADD-47-10X	
Guanidine nitrate	506-93-4	0.1 mg/mL	MeOH	M-8330-ADD-10	
Hexahydro-1,3-trinitroso-1,3,5-triazine	13980-04-6	0.1 mg/mL	AcCN	M-8330-ADD-46	
		1 mg/mL	AcCN	M-8330-ADD-46-10X	
Hexanitrodiphenylamine	131-73-7	100 µg/mL	AcCN:MeOH (50:50)	M-8330-ADD-37	
Hexanitrostilbene (HNS) ♦	20062-22-0	0.1 mg/mL	AcCN	M-8330-ADD-26 *	
Hexamethylene diperoxide diamine (HMDD) NEW	112204-35-0	100 µg/mL	AcCN	M-8330-ADD-45	
		1000 µg/mL	AcCN	M-8330-ADD-45-10X	
Hexamethylenetriperoxide diamine (HMTD)	283-66-9	0.1 mg/mL	AcCN	M-8330-ADD-25	
HMX	2691-41-0	1 mg/mL	AcCN:MeOH (50:50)	M-8330-04	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-04-0.1X	
Hydrazine	302-01-2	0.1 mg/mL	MeOH	M-8330-ADD-8	
2-Hydroxylamino-4,6-dinitrotoluene ♦ (3 month stability)		0.1 mg/mL	AcCN	M-8330-ADD-18 *	
4-Hydroxylamino-2,6-dinitrotoluene ♦ (3 month stability)		0.1 mg/mL	AcCN	M-8330-ADD-20 *	
Nitrobenzene ♦	98-95-3	1 mg/mL	AcCN:MeOH (50:50)	M-8330-06	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-06-0.1X	
N-Nitrodimethylamine	4164-28-7	100 µg/mL	AcCN	M-8330-ADD-40	
Nitroglycerin	55-63-0	0.1 mg/mL	EtOH	M-8330-ADD-1	
		1.0 mg/mL	EtOH:MeOH (97:3)	M-8330-ADD-1-10X	
1-Nitroglycerin	624-43-1	100 µg/mL	AcCN:MeOH (50:50)	M-8330-ADD-31	
2-Nitroglycerin	620-12-2	100 µg/mL	AcCN:MeOH (50:50)	M-8330-ADD-32	
Nitroguanidine	556-88-7	0.1 mg/mL	MeOH	M-8330-ADD-6	
Nitromethane	75-52-5	0.1 mg/mL	MeOH	M-8330-ADD-7	
2-Nitrotoluene ♦	88-72-2	1 mg/mL	AcCN:MeOH (50:50)	M-8330-07	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-07-0.1X	
3-Nitrotoluene ♦	99-08-1	1 mg/mL	AcCN:MeOH (50:50)	M-8330-08	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-08-0.1X	
4-Nitrotoluene ♦	99-99-0	1 mg/mL	AcCN:MeOH (50:50)	M-8330-09	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-09-0.1X	
Pentaerythrityl trinitrate NEW	22026-67-1	100 µg/mL	MeOH	M-8330-ADD-44	

* ColdPAK required to maintain integrity of product.



Explosives (Continued)

Compound	CAS No.	Conc.	Matrix	Cat. No.	1 mL
PETN	78-11-5	0.1 mg/mL	MeOH	M-8330-ADD-2	
		1 mg/mL	MeOH	M-8330-ADD-2-10X	
Picramic acid	831-52-7	100 µg/mL	AcCN:MeOH (50:50)	M-8330-ADD-22	
Picric acid	88-89-1	0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-ADD-3	
Propyleneglycol dinitrate	6423-43-4	100 µg/mL	MeOH	M-8330-ADD-35	
PYX	38082-89-2	0.1 mg/mL	AcCN	M-8330-ADD-11	
RDX	121-82-4	1 mg/mL	AcCN:MeOH (50:50)	M-8330-05	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-05-0.1X	
TATP	17088-37-8	0.1 mg/mL	AcCN	M-8330-ADD-24 *	
TEGDN		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-ADD-41-R1	
2,2',6,6'-Tetranitro-4,4'-azotoluene ♦		0.1 mg/mL	AcCN	M-8330-ADD-17	
4,4',6,6'-Tetranitro-2,2'-azotoluene ♦		0.1 mg/mL	AcCN	M-8330-ADD-19	
2,2',6,6'-Tetranitro-4,4'-azoxytoluene ♦		0.1 mg/mL	AcCN	M-8330-ADD-15	
Tetryl	479-45-8	1 mg/mL	AcCN:MeOH (50:50)	M-8330-10	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-10-0.1X	
TNT	118-96-7	1 mg/mL	AcCN:MeOH (50:50)	M-8330-11	
		0.1 mg/mL	AcCN:MeOH (50:50)	M-8330-11-0.1X	
1,3,5-Triamino-2,4,6-trinitrobenzene	3058-38-6	40 µg/mL	DMF	M-8330-ADD-14-DMF	
2,4,6-Triaminotoluene trihydrochloride (TNT free)	634-87-7	5 mg	NEAT	M-8330-ADD-23N-5MG	
Trimethylethane trinitrate	3032-55-1	100 µg/mL	AcCN:MeOH (50:50)	M-8330-ADD-28	
1,3,5-Trinitrobenzene ♦	99-35-4	1 mg/mL	AcCN:MeOH	M-8330-12	
		0.1 mg/mL	AcCN:MeOH	M-8330-12-0.1X	
2,4,6-Trinitroresorcinol	82-71-3	1 mg/mL	AcCN:MeOH	M-8330-ADD-29	

Method 8330 Multi-Component Formulations for Explosive Analysis

The following A and B mixes provide better resolution between possible coeluting analytes, assisting the chemist to optimize the HPLC system. AccuStandard suggest using the high concentration set **M-8330-R-10X-SET** when first performing Method 8330 development..

Mix A

M-8330A *	1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)	7 comps.
M-8330A-10X *	1 x 1 mL
1.0 mg/mL each in AcCN:MeOH (50:50)	7 comps.
1,3-Dinitrobenzene	RDX
2,4-Dinitrotoluene	1,3,5-Trinitrobenzene
HMX	TNT
Nitrobenzene	

Mix B

M-8330B *	1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)	5 comps.
M-8330B-10X *	1 x 1 mL
1.0 mg/mL each in AcCN:MeOH (50:50)	5 comps.
Tetryl	3-Nitrotoluene
2,6-Dinitrotoluene	4-Nitrotoluene
2-Nitrotoluene	

M-8330A-R *	1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)	8 comps.
M-8330A-R-10X *	1 x 1 mL
1.0 mg/mL each in AcCN:MeOH (50:50)	8 comps.
2-Amino-4,6-dinitrotoluene	Nitrobenzene
1,3-Dinitrobenzene	RDX
2,4-Dinitrotoluene	1,3,5-Trinitrobenzene
HMX	TNT

M-8330B-R *	1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)	7 comps.
M-8330B-R-10X *	1 x 1 mL
1.0 mg/mL each in AcCN:MeOH (50:50)	7 comps.
2-Amino-4,6-dinitrotoluene	2-Nitrotoluene
4-Amino-2,6-dinitrotoluene	3-Nitrotoluene
Tetryl	4-Nitrotoluene
2,6-Dinitrotoluene	

Composite Explosive Mixture

M-8330-R-0.1X	1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)	
M-8330-R-0.5X	1 x 1 mL
0.5 mg/mL each in AcCN:MeOH (50:50)	
1,3-Dinitrobenzene	3-Nitrotoluene
2,4-Dinitrotoluene	4-Nitrotoluene
2,6-Dinitrotoluene	Tetryl
HMX	TNT
RDX	1,3,5-Trinitrobenzene
Nitrobenzene	2-Amino-4,6-dinitrotoluene
2-Nitrotoluene	4-Amino-2,6-dinitrotoluene

M-8330B-R2 *	1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)	6 comps.
M-8330B-R2-10X *	1 x 1 mL
1.0 mg/mL each in AcCN:MeOH (50:50)	6 comps.
4-Amino-2,6-dinitrotoluene	2-Nitrotoluene
Tetryl	3-Nitrotoluene
2,6-Dinitrotoluene	4-Nitrotoluene

Surrogate Standard

M-8330-SS	1 x 1 mL
1.0 mg/mL in MeOH	
1,2-Dinitrobenzene	

Internal Standard

M-8330-IS	1 x 1 mL
M-8330-IS-PAK	5 x 1 mL
1.0 mg/mL in MeOH	
3,4-Dinitrotoluene	

SAVE

* ColdPAK required to maintain integrity of product.

Explosives by HPLC Set

M-8330-R-SET *	14 x 1 mL
Each at 100 µg/mL in AcCN:MeOH (50:50)	
M-8330-R-10X-SET *	14 x 1 mL
Each at 1000 µg/mL in AcCN:MeOH (50:50)	
1,3-Dinitrobenzene (01)	3-Nitrotoluene (08)
2,4-Dinitrotoluene (02)	4-Nitrotoluene (09)
2,6-Dinitrotoluene (03)	Tetryl (10)
HMX (04)	TNT (11)
RDX (05)	1,3,5-Trinitrobenzene (12)
Nitrobenzene (06)	2-Amino-4,6-dinitrotoluene (13)
2-Nitrotoluene (07)	4-Amino-2,6-dinitrotoluene (14)



Explosives

Method 529 Explosive & Related Compounds by SPE & Capillary Column GC/MS

Method 529 Calibration Curve

All in µg/mL in Ethyl acetate

M-529-	01	02	03	04	05	06	07	08	09
2-Amino-4,6-dinitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
4-Amino-2,6-dinitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
3,5-Dinitroaniline	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
1,3-Dinitrobenzene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
2,4-Dinitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
2,6-Dinitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
RDX	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
Nitrobenzene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
2-Nitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
3-Nitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
4-Nitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
1,3,5-Trinitrobenzene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
Tetryl	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
TNT	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10

Internal Standard Stock Solution

M-529-IS

2.0 mg/mL Ethyl acetate

1 x 1 mL

3,4-Dinitrotoluene

Internal Standard Fortification Solution

M-529-ISFS

200 µg/mL each in Ethyl acetate:AcCN (96:4)

1 x 1 mL

14 comps.

2-Amino-4,6-dinitrotoluene	Nitrobenzene
4-Amino-2,6-dinitrotoluene	2-Nitrotoluene
3,5-Dinitroaniline	3-Nitrotoluene
1,3-Dinitrobenzene	4-Nitrotoluene
2,4-Dinitrotoluene	1,3,5-Trinitrobenzene
2,6-Dinitrotoluene	Tetryl
RDX	TNT

Surrogate Analyte Stock Solutions

M-529-SS1

M-529-SS1-PAK

1000 µg/mL each in MeOH

SAVE

1 x 1 mL

5 x 1 mL

2 comps.

1,3,5-Trimethyl-2-nitrobenzene

1,2,4-Trimethyl-5-nitrobenzene

M-529-SS2

M-529-SS2-PAK

1000 µg/mL each in CH₂Cl₂

SAVE

1 x 1 mL

5 x 1 mL

Nitrobenzene-d₅

Surrogate Analyte Fortification Solution

M-529-SAFS

100 µg/mL each in MeOH

1 x 1 mL

3 comps.

1,3,5-Trimethyl-2-nitrobenzene

Nitrobenzene-d₅

1,2,4-Trimethyl-5-nitrobenzene

Method 8095 Explosives by GC/ECD

This method is a companion to EPA Method 8330, utilizing the sensitivity and selectivity of the ECD.

Explosive Stock Solution A

M-8095-SSA-100X

M-8095-SSA-100X-PAK

100 µg/mL each in AcCN:MeOH (50:50)

SAVE

1 x 1 mL

5 x 1 mL

10 comps.

2-Amino-4,6-dinitrotoluene	1,3,5-Trinitrobenzene
4-Amino-2,6-dinitrotoluene	TNT
1,3-Dinitrobenzene	RDX
2,6-Dinitrotoluene	Tetryl
2,4-Dinitrotoluene	HMX

Explosive Stock Solution B

M-8095-SSB-100X

M-8095-SSB-100X-PAK

At stated conc. in AcCN:MeOH (50:50)

SAVE

1 x 1 mL

5 x 1 mL

7 comps.

Nitrobenzene	(500 µg/mL)	Nitroglycerin	(500 µg/mL)
3-Nitrotoluene	(500 µg/mL)	PETN	(500 µg/mL)
2-Nitrotoluene	(500 µg/mL)	3,5-Dinitroaniline	(100 µg/mL)
4-Nitrotoluene	(500 µg/mL)		

Explosive Surrogate Standards

M-8095-SS-01

M-8095-SS-01-PAK

100 µg/mL in AcCN

SAVE

1 x 1 mL

5 x 1 mL

3,4-Dinitrotoluene

M-8095-SS-03

M-8095-SS-03-PAK

100 µg/mL in AcCN

SAVE

1 x 1 mL

5 x 1 mL

2,5-Dinitrotoluene

M-8095-SS-02

M-8095-SS-02-PAK

100 µg/mL in AcCN

SAVE

1 x 1 mL

5 x 1 mL

2-Methyl-4-nitroaniline



DIN Explosive Standards

DIN 38407-21 Explosives

Examination of water, wastewater, and sludge for determination of selected explosives and related compounds by HPLC with UV detection

DIN38407-21-A 1 x 1 mL
10 µg/mL each in MeOH 12 comps.

Picric acid	Nitroglycerin
HMX	TNT
RDX	2-Nitrotoluene
Tetryl	PETN
EGDN	4-Nitrotoluene
DEGDN	3-Nitrotoluene

DIN 38407-21 Related Compounds

Examination of water, wastewater, and sludge for determination of selected explosives and related compounds by HPLC with UV detection

DIN38407-21-B 1 x 1 mL
10 µg/mL each in MeOH:AcCN (98:2) 8 comps.

1,3,5-Trinitrobenzene
1,3-Dinitrobenzene
4-Amino-2,6-dinitrotoluene
2,2',4,4',6,6'-Hexanitrodiphenylamine
2-Amino-4,6-dinitrotoluene
2,6-Dinitrotoluene
2,4-Dinitrotoluene
Diphenylamine

Gun Surveillance Standards

Inorganic ICP Standards for Gun Shot Residue



Starting Material Matrix	Unit	1000 µg/mL Cat. No.	10,000 µg/mL Cat. No.
Antimony	50 mL	-----	ICP-02N-10X-0.5
Sb Dilute HNO ₃ tr.	100 mL	ICP-02N-1	ICP-02N-10X-1
Tartaric acid	500 mL	ICP-02N-5	ICP-02N-10X-5
Barium	50 mL	-----	ICP-04N-10X-0.5
Ba(NO ₃) ₂	100 mL	ICP-04N-1	ICP-04N-10X-1
2-5% Nitric acid	500 mL	ICP-04N-5	ICP-04N-10X-5
Lead	50 mL	-----	ICP-29N-10X-0.5
Pb(NO ₃) ₂	100 mL	ICP-29N-1	ICP-29N-10X-1
2-5% Nitric acid	500 mL	ICP-29N-5	ICP-29N-10X-5

Gun Surveillance Standard

EXP-GSS

At stated conc. (µg/mL) in AcCN

1 x 1 mL
9 comps.

Dimethyl phthalate	200
2,4'-Dinitrodiphenylamine	50
2,4-Dinitrodiphenylamine	50
2-Nitrodiphenylamine	50
4-Nitrodiphenylamine	50
2,2'-Dinitrodiphenylamine	50
4,4'-Dinitrodiphenylamine	50
Diphenylamine	200
N-Nitrosodiphenylamine	75

Organic Compounds for Firearm Discharge Analysis



Compound	Conc.	Matrix	Cat. No.	1 mL
2,4-Dinitrotoluene	100 µg/mL	AcCN:MeOH	M-8330-02-0.1X	
C ₇ H ₆ N ₂ O ₄	1000 µg/mL	AcCN:MeOH	M-8330-02	
2,6-Dinitrotoluene	100 µg/mL	AcCN:MeOH	M-8330-03-0.1X	
C ₇ H ₆ N ₂ O ₄	1000 µg/mL	AcCN:MeOH	M-8330-03	
3,4-Dinitrotoluene	100 µg/mL	AcCN:MeOH	M-8330-04-0.1X	
C ₇ H ₆ N ₂ O ₄	1000 µg/mL	AcCN:MeOH	M-8330-04	
Diphenylamine NEW	100 µg/mL	DCM	APP-9-097	
C ₁₂ H ₁₁ N				
Ethylcentralite NEW	100 µg/mL	AcCN:MeOH	M-8330-ADD-50	
C ₁₇ H ₁₂ N ₂ O				
Methylcentralite NEW	100 µg/mL	AcCN:MeOH	M-8330-ADD-49	
C ₁₅ H ₁₀ N ₂ O				
2-Nitrodiphenylamine NEW	100 µg/mL	AcCN:MeOH	M-8330-ADD-51	
C ₁₂ H ₁₀ N ₂ O ₂				
4-Nitrodiphenylamine NEW	100 µg/mL	AcCN:MeOH	M-8330-ADD-52	
C ₁₂ H ₁₀ N ₂ O ₂				
1-Nitroglycerine ►	100 µg/mL	AcCN:MeOH	M-8330-ADD-31	
C ₃ H ₅ N ₃ O ₉				
2-Nitroglycerine ►	100 µg/mL	AcCN:MeOH	M-8330-ADD-32	
C ₃ H ₅ N ₃ O ₉				
N-Nitrosodiphenylamine	100 µg/mL	MeOH	APP-9-150	
C ₁₂ H ₁₀ N ₂ O				
2-Nitrotoluene	1000 µg/mL	AcCN:MeOH	M-8330-07	
C ₇ H ₇ NO ₃				
3-Nitrotoluene	1000 µg/mL	AcCN:MeOH	M-8330-08	
C ₇ H ₇ NO ₃				
4-Nitrotoluene	1000 µg/mL	AcCN:MeOH	M-8330-09	
C ₇ H ₇ NO ₃				

Technical Note

We offer gunshot residue standards through our "AccuTrace™" inorganic products. Custom solutions of Antimony, Barium and Lead are available for use with ICP instrumentation. Organic compounds identified in the discharge of a firearm are also available.

Any compound without ► could contain possible isomers



Plastic Additives

Plastics and other polymeric materials have become indispensable in our everyday lives. Although they offer many benefits, hazardous chemicals may be present in these materials. These hazardous materials can be introduced either intentionally as additives, or unintentionally as pollutants.

AccuStandard has collected or synthesized many of these polymer adjuncts and is pleased to present them in this newest unique product line as certified reference materials for monitoring these chemicals.

The occurrence, toxicity and analytical methods used in the detection, monitoring (for both presence and levels) of these chemical classes and individual compounds within these classes are more thoroughly described in the book the "Handbook for the Chemical Analysis of Plastic and Polymer Additives" 2nd Ed. (published in 2015 by CRC Press). Both manufacturers and analytical laboratories will find the CRC book to be an authoritative source of information that compliments this catalog.

Calibrating with Certified Standards adds an additional layer of confidence in the analysis that can aid in meeting regulations, assisting in challenges from governmental regulations, and providing protection from legal issues that could be raised by consumers.

Below find a list of regulations that require analysis of many of these additives:

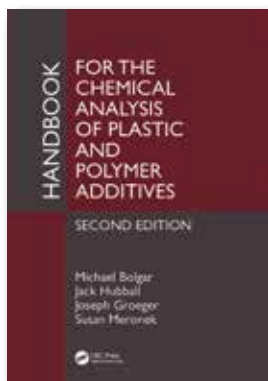
- EU Directives 2002/96/EC and 2002/95/EC WEEE (Waste Electrical and Electronic Equipment) that establishes limits for the content of a product that must be recyclable or reusable.
- EU Directive 2003/11/EC RoHS (restriction of the use of certain hazardous substances) restricting the use of six toxins from most electronic & electrical equipment.
- EU Directive 2002/72/EC relating to plastic materials and articles intended to come in contact with foodstuffs.
- EU Directive 2002/61/EC aryl amine breakdown products in azo dyes.
- EU Directive 67/548/EEC relating to the packaging of dangerous substances.
- FDA and The United States Code of Federal Regulations (CFR) - 21 CFR Parts 175-178 that regulate adhesives, components of coatings, paper and paperboard components, polymers and adjuvants and production aids.
- United States Environmental Protection Agency (USEPA) - Methods 606, 506-1 and 8061 regulating phthalates and adipates.

Accelerants	87
Antidegradants	87
Antifoams	87
Antioxidants	87-88
Antiozonants	88
Blowing Agents	88
Coupling Agents	89
Crosslinking Agents	89
Flame Retardants	89, 26-58
Plasticizers	90
Processing Aids	90
Retarders	90
Stearates	91
UV Stabilizers	91
Vegetable Oils	91
Deuterated Phthalates	91

PolyAdd  **Check™**

The perfect companion for your analysis!

The Handbook for Chemical Analysis of Plastic and Polymer Additives, 2nd Edition



Each Compound has:

Chemical Information

- Structure
- CAS Number (where applicable)
- RTECS Number (where available)
- Formula
- Molecular Weight
- IUPAC Name, other common names and some popular brand names (where available)

Physical Properties

- Appearance
- Melting and Boiling Points
- Stability
- Solubilities in several common solvents

Other Important Information

- Application
- Regulatory
- Environmental Impact
- Point of Release
- Toxicological Data

Analytical Data

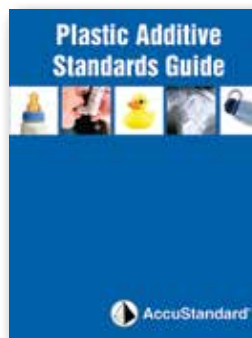
- Mass Spectrum with key ions tabulated
- Chromatogram with conditions

This reference handbook contains the compounds in this catalog, with important reference data to aid in testing and compliance. There is also information to help with real world examples, tips for analysis in challenging matrices, and much, much more!

The new book will be available Spring 2015

Cat. No: PLAS-CRC-BOOK2

Plastic Additive Standards Guide



Both the Handbook and Guide are organized into classes by additive type. Manufacturers can easily find Standards that match their particular application and product formulation for the following product categories:

- Medical Devices
- Food Packaging
- Pharmaceutical Packaging
- Toys
- Wire and Cable
- etc.

For chemical structure, formula and molecular weight, visit our website, to download our catalog.



Trade-named products are usually technical mixtures.

Solutions at 1000 µg/mL in Hexane, except where indicated
☆ Hexane:Acetone, -A Acetone, -T Toluene, -M Methanol, - DMSO

Accelerants

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Accelerator BBTS	N-(1,1-dimethylethyl)-2-benzo thiazolesulfenamide	95-31-8	PLAS-AC-003N	PLAS-AC-003S
Accelerator CBTS	N-cyclohexyl-2-benzothiazole sulfenamide	95-33-0	PLAS-AC-007N	-----
Accelerator EZ & EZ-SP	Zinc diethyldithiocarbamate	14324-55-1	PLAS-AC-006N	PLAS-AC-006S
Accelerator MBT, MBT/MG	2-Mercaptobenzothiazole	149-30-4	PLAS-AC-001N	PLAS-AC-001S
Activator OT Urea	Urea	57-13-6	PLAS-AC-005N	PLAS-AC-005S-A
Akroform ETU-22 PM	Ethylene thiourea	96-45-7	PLAS-AC-002N	PLAS-AC-002S ☆
Cure-Rite® IBT	Tetraisobutylthiuram disulfide	3064-73-1	PLAS-AC-004N	PLAS-AC-004S
Dipentamethylenethiuram tetrasulfide		120-54-7	PLAS-AC-009N	-----
1,3-Diphenyl-2-thiourea		102-08-9	PLAS-AC-108N	-----
1,3-Di-o-tolylguanidine		97-39-2	PLAS-AC-010N	-----

Antidegradants

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Akrochem® Antiox 12	Butylated reaction product of p-cresol and dicyclopentadiene	68610-51-5	PLAS-AD-001N	PLAS-AD-001S
Ethanox® 314	1,3,5-Tris(3,5-di-tert-butyl-4-hydroxybenzyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione	27676-62-6	PLAS-AX-084N	PLAS-AX-084S
Ethanox® 703	2, 6-Di-tert-butyl-N-N-dimethylamino-p-cresol	88-27-7	PLAS-AX-085N	PLAS-AX-085S
Santoflex® IPPD	N-phenyl-N'-propan-2-yl-benzene-1,4-diamine	101-72-4	PLAS-AD-003N	PLAS-AD-003S ☆
Santoflex® 77PD	N,N'-bis(1,4-dimethylpentyl)-p-phenylenediamine	3081-14-9	PLAS-AD-002N	PLAS-AD-002S

Antifoams

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
SF100	Dimethyl silicone fluid	9016-00-6	PLAS-AF-001N	PLAS-AF-001S

Antioxidants

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Alkanox® P27	bis(2,4-Di-tert-butylphenyl)pentaerythritol diphosphate and magnesium aluminum hydroxy carbonate hydrate	26741-53-7 / 11097-59-9	PLAS-AX-032N	-----
Alkanox® TNPP	Tris(mono-nonylphenyl) phosphite with up to 1% triisopropanol amine	26523-78-4	PLAS-AX-077N	PLAS-AX-077S
Anox® PP18	Octadecyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propanoate	2082-79-3	PLAS-AX-114N	-----
Antioxidant 60	2H-benzimidazole-2-thione, 1,3-di-hydro-4(or 5)-methyl	53988-10-6	PLAS-AX-019N	PLAS-AX-019S-M
Antioxidant S	Benzenamine, N-phenyl, reaction products with 2,4,4-trimethylpentene	68411-46-1	PLAS-AX-057N	PLAS-AX-057S
2-(2H-Benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol		3147-75-9	PLAS-AX-094N	-----
BLS® 234	2-[2-Hydroxy-3,5-di-(1,1-dimethylbenzyl)]-2H-benzotriazole	70321-86-7	PLAS-AX-088N	-----
BLS® 292	bis(1,2,2,6,6-pentamethyl-4-piperidinyl)sebacate and Methyl(1,2,2,6,6-pentamethyl-4-piperidinyl)sebacate	41556-26-7 / 8219-37-7	PLAS-AX-089N	-----
BLS® 1622	Dimethyl succinate polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidine ethanol	65447-77-0	PLAS-AX-096N	-----
BLS® 1944	Poly[[6-[(1,1,3,3-tetramethylbutyl)amino]]-s-triazine-2,4-diyl][(2,2,6,6-tetramethyl-4-piperidyl)imino]]hexamethylene[(2,2,6,6-tetramethyl-4-piperidyl)imino]	70624-18-9	PLAS-AX-090N	-----
BNX 1077	Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, isotridecyl ester	847488-62-4	PLAS-AX-087N	-----
BNX 1225TPR	Blend of BNX® 1010, Benefos® 1680 and SIS Block Copolymer	6683-19-8/31570-04-4/ 25038-32-8	PLAS-AX-091N	-----
2-tert-Butyl-6-(5-chloro-2H-benzotriazol-2-yl)-4-methylphenol		3896-11-5	PLAS-AX-093N	-----
4,4'-Butylidenebis(6-tert-butyl-m-cresol)		85-60-9	PLAS-AX-105N	-----
Cyanox® 1212	Lauryl stearylthiopropionate	13103-52-1	PLAS-AX-047N	PLAS-AX-047S
Cyanox® 1790	1,3,5-Tris(4-tert-butyl-3-hydroxy-2,6-dimethylbenzyl)-1,3,5-triazine-2,4,6-(1h, 3h,5h)-trione	40601-76-1	PLAS-AX-005N	PLAS-AX-005S
Cyanox® 2246	2,2'-Methylene-bis-(4-methyl-6-tert-butyl-phenol)	119-47-1	PLAS-AX-013N	PLAS-AX-013S
Cyanox® 425	2,2'-Methylene-bis-(4-ethyl-6-tert-butyl-phenol)	88-24-4	PLAS-AX-012N	PLAS-AX-012S
Cyanox® LTDP	Dilaurylthiopropionate	123-28-4	PLAS-AX-041N	PLAS-AX-041S
Cyanox® STDP	Distearylthiopropionate	693-36-7	PLAS-AX-044N	PLAS-AX-044S
Dibenzylhydroxylamine		621-07-8	PLAS-AX-092N	-----
3,9-Bis(2,4-dicumylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5,5]undecane		154862-43-8	PLAS-AX-111N	-----
Diethyl 3,5-Di-tert-butyl-4-hydroxybenzyl phosphonate		976-56-7	PLAS-AX-110N	-----
N,N'-Diethylthiourea	1,3-Diethyl-2-thiourea	105-55-5	PLAS-AX-103N	-----
O,O'-Diocetadecylpentaerythritol bis(phosphite)		3806-34-6	PLAS-AX-108N	-----
Distyryl biphenyl		27344-41-8	PLAS-AX-099N	-----
2,6-Di-tert-butyl-4-ethylphenol		4130-42-1	PLAS-AX-107N	-----
2,6-Di-tert-butylphenol		128-39-2	PLAS-AX-112N	-----
Ethanox® 310	Pentaerythritol tetrakis (3-(3,5-di-t-butyl-4-hydroxyphenyl)propionate	6683-19-8	PLAS-AX-086N	PLAS-AX-086S
Ethanox® 323	Nonylphenol disulfide oligomer		PLAS-AX-082N	PLAS-AX-082S
Ethanox® 330	1,3,5-Trimethyl-2,4,6-tris(3,5-di-tert-butyl-4-hydroxybenzyl) benzene	1709-70-2	PLAS-AX-021N	PLAS-AX-021S
Ethanox® 376	3,5-Di-tert-butyl-4-hydroxyhydrocinnamic acid, octadecyl ester	2082-79-3	PLAS-AX-054N	PLAS-AX-054S

Antioxidants continued on next page



Plastic Additives

Trade-named products are usually technical mixtures.

Solutions at 1000 µg/mL in Hexane, except where indicated
☆ Hexane:Acetone, -A Acetone, -T Toluene, -M Methanol, - DMSO

Antioxidants (Continued)

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Ethanox® 702	4,4'-Methylenebis(2,6-di-tert-butylphenol)	118-82-1	PLAS-AX-025N	PLAS-AX-025S
Ethanox® 703	2,6-di-tert-butyl-N,N-dimethylamino-p-cresol	88-27-7	PLAS-AX-085N	PLAS-AX-085S
Ethaphos® 368	Tris(2,4-di-tert-butylphenyl) phosphite	31570-04-4	PLAS-AX-074N	PLAS-AX-074S
2,2'-Ethylidene-bis(4,6-di-tert-butylphenol)		35958-30-6	PLAS-AX-106N	-----
2-(2'-Hydroxy-3',5'-di-tert-amylphenyl) benzotriazole		25973-55-1	PLAS-AX-095N	-----
Irganox® 245	Triethyleneglycol bis[3-(3'-tert-butyl-4'-hydroxy-5'-methylphenyl)propionate]	36443-68-2	PLAS-AX-070N	PLAS-AX-070S
Irganox 259	Hexamethylene bis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)	35074-77-2	PLAS-AX-045N	PLAS-AX-045S
Irganox 565	2,4-bis(n-Octylthio)-6-(4-hydroxy-3,5-di-tert-butylanilino)-1,3,5-triazine	991-84-4	PLAS-AX-014N	PLAS-AX-014S
Irganox 1035	Thiodiethylene bis(3,5-di-tert-butyl-4-hydroxyhydrocinnamate)	41484-35-9	PLAS-AX-069N	PLAS-AX-069S
Irganox 1081	6,6'-Di-tert-butyl-2,2'-thiodi-p-cresol	90-66-4	PLAS-AX-080N	PLAS-AX-080S
Irganox 1098	N,N'-1,6-Hexanediyl bis[3,5-bis(1,1-dimethylethyl)-4-hydroxy-benzenepropanamide]	23128-74-7	PLAS-AX-050N	PLAS-AX-050S ☆
Irganox 1425 WL	Ethyl 3,5-di-tert-butyl-4-hydroxybenzylphosphonate, calcium salt and polyethylene-wax mixture	65140-91-2 / 9002-88-4	PLAS-AX-079N	-----
Irganox 3125	3,5-Di-tert-butyl-4-hydroxyhydrocinnamic ester with 1,3,5-tris[2-hydroxyethyl]-s-triazine-2,4,6[1H,3H,5H]-trione	34137-09-2	PLAS-AX-020N	PLAS-AX-020S ☆
Irganox 3144 FF	1,3,5-Tris(3,5-di-tert-butyl-4-hydroxybenzyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione	27676-62-6	PLAS-AX-078N	PLAS-AX-078S
Irganox E 201	alpha-Tocopherol	10191-41-0	PLAS-AX-027N	PLAS-AX-027S
Irganox MD 1024	1,2-bis(3,5-Di-tert-butyl-4-hydroxyhydrocinnamoyl)hydrazide	32687-78-8	PLAS-AX-001N	PLAS-AX-001S ☆
Isonox® 132	2,6-Di-tert-butyl-4-sec-butylphenol	17540-75-9	PLAS-AX-018N	PLAS-AX-018S
Isonox 232	2,6-Di-tert-butyl-4-nonylphenol	4306-88-1	PLAS-AX-063N	PLAS-AX-063S
Lowinox® AH25	2,5-bis(1,1-Dimethylpropyl)-1,4-benzenediol	79-74-3	PLAS-AX-016N	PLAS-AX-016S
Lowinox CPL	Polymeric sterically hindered phenol	68610-51-5	PLAS-AX-059N	PLAS-AX-059S
Lowinox TBM-6	4,4'-Thiobis(2-tert-butyl-5-methylphenol)	96-69-5	PLAS-AX-024N	PLAS-AX-024S
Markstat® 60	Polyethylene glycol ether (<20% NaClO ₂)		PLAS-AX-028N	PLAS-AX-028S
Naugard® 412S	beta-Laurylthiopropionate	29598-76-3	PLAS-AX-030N	PLAS-AX-030S
Naugard 445	4,4'-bis(alpha,alpha-Dimethylbenzyl)diphenylamine	10081-67-1	PLAS-AX-022N	PLAS-AX-022S
Naugard 635	4-(1-phenylethyl)-N-[4-(1-phenylethyl)phenyl]aniline	68442-68-2	PLAS-AX-113N	-----
Naugard 956	Proprietary blend of primary and secondary antioxidants		PLAS-AX-060N	PLAS-AX-060S-T
Naugard A	Acetone diphenylamine condensation products	68412-48-6	PLAS-AX-026N	PLAS-AX-026S
Naugard B-25	1:1 blend of Naugard® 10 and Naugard® 524	6683-19-8 / 31570-04-4	PLAS-AX-061N	PLAS-AX-061S
Naugard BHT	2,6-Di-tert-butyl-4-methylphenol	128-37-0	PLAS-AX-017N	PLAS-AX-017S
Naugard HM-22	Blend of phenolic primary and diphenylamine secondary antioxidants (Naugards 76 and 445)	10081-67-1 / 2082-79-3	PLAS-AX-033N	PLAS-AX-033S
Naugard J	N,N'-Diphenyl-p-phenylenediamine	74-31-7	PLAS-AX-048N	PLAS-AX-048S ☆
Naugard NBC	Nickel dibutyl dithiocarbamate	13927-77-0	PLAS-AX-051N	PLAS-AX-051S
Naugard PANA	N-Phenyl-1-naphthylamine	90-30-2	PLAS-AX-058N	PLAS-AX-058S
Naugard PHR	Tris(mono-nonylphenyl) phosphite with up to 1% triisopropanol amine	26523-78-4	PLAS-AX-076N	PLAS-AX-076S
Naugard PS-30	Benzenamine, N-phenyl, reaction products with 2,4,4-trimethylpentene	68411-46-1	PLAS-AX-038N	PLAS-AX-038S
Naugard PS-35	Butylated, octylated diphenylamine 2,6 di-tert-butyl-4-sec-butyl phenol		PLAS-AX-046N	PLAS-AX-046S
Naugard Q Extra	1,2-Dihydro-2,2,4-trimethylquinoline (polymerized)	26780-96-1	PLAS-AX-002N	PLAS-AX-002S
Naugard RM-51	Tris(mono-nonylphenyl)phosphite,2,2'-methylene bis (4-methyl-6-nonyl phenol)	26523-78-4	PLAS-AX-034N	PLAS-AX-034S
Naugard Super Q	1,2-Dihydro-2,2,4-trimethylquinoline (polymerized)	147-47-7	PLAS-AX-003N	PLAS-AX-003S
Naugard XL-1	2,2'-Oxamidobis[ethyl-3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]	70331-94-1	PLAS-AX-008N	PLAS-AX-008S ☆
Propyl gallate	propyl 3,4,5-trihydroxybenzoate	121-79-9	PLAS-AX-109N	-----
bis(2,2,6,6-Tetramethyl-4-piperidyl) sebacate NEW		52829-07-9	PLAS-AX-097N	-----
2,2'-(2,5-thiophenediyl)bis(5-tert-butylbenzoxazole) NEW		7128-64-5	PLAS-AX-098N	-----
Ultrinox® 626	bis(2,4-Di-tert-butylphenyl)pentaerythritol diphosphite	26741-53-7	PLAS-AX-031N	PLAS-AX-031S

Antiozonants

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Antiozonant NIBUD	Nickel dibutyl dithiocarbamate	13927-77-0	PLAS-AZ-001N	PLAS-AZ-001S
Akrowax™ 195	Petroleum Wax	121-79-9	PLAS-AZ-002N	-----

Blowing Agents, Plasticizers

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
CPW-100	Chlorinated paraffin wax	63449-39-8	PLAS-BA-001N	PLAS-BA-001S
Celogen® AZ	Carbamoyliminoureia	123-77-3	PLAS-BA-002N **	PLAS-BA-002S-DMSO
Celogen® RA	[(4-methylphenyl)sulfonylamino]urea	10396-10-8	PLAS-BA-003N	-----

** This product can not ship by air.



Coupling Agents

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Silquest® A-187	gamma-Glycidioxypropyltrimethoxysilane	2530-83-8	PLAS-CA-004N	PLAS-CA-004S
Silquest A-1100	gamma-Aminopropyltriethoxysilane	919-30-2	PLAS-CA-002N	PLAS-CA-002S
Silquest A-1102	gamma-Aminopropyltriethoxysilane (Tech grade)	919-30-2	PLAS-CA-003N	PLAS-CA-003S
Silquest A-1289	bis-(Triethoxysilylpropyl)tetrasulfane	211519-85-6	PLAS-CA-001N	PLAS-CA-001S
Silquest A-137	Octyltriethoxysilane	2943-75-1	PLAS-CA-005N	PLAS-CA-005S
Silquest A-2171	Vinylmethyldimethoxysilane	16753-62-1	PLAS-CA-006N	PLAS-CA-006S

Cross-Linking Agents

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
F-300, F-1000, F-1500, F-2000, F-3000	Stearic acid	57-11-4	PLAS-CL-006N	PLAS-CL-006S-D
Perkacit® DPG	N,N'-Diphenylguanidine	102-06-7	PLAS-CL-004N	PLAS-CL-004S ☆
Perkacit MBT	2-Mercaptobenzothiazole	149-30-4	PLAS-CL-002N	PLAS-CL-002S
Perkacit MBTS	2,2'-Dithiobis(benzothiazole)	120-78-5	PLAS-CL-001N	PLAS-CL-001S
Perkacit NDBC	Nickel dibutyl dithiocarbamate	13927-77-0	PLAS-CL-005N	PLAS-CL-005S
Perkacit ZDEC	Zinc diethyldithiocarbamate	14324-55-1	PLAS-CL-007N	PLAS-CL-007S
Resimene® 3520	Hexamethoxy methyl melamine	3089-11-0	PLAS-CL-003N	PLAS-CL-003S

Flame Retardants (see PCB and PBDE section for complete listings)

Chemical Name	CAS No.	Matrix	Solution (1 mL)
Aroclor® 1016 (Tech Mix)	12674-11-2	1000 µg/mL in Hexane 50 mg	C-216S-H-10X C-216N-50MG
Aroclor 1221 (Tech Mix)	11104-28-2	1000 µg/mL in Hexane 50 mg	C-221S-H-10X C-221N-50MG
Aroclor 1232 (Tech Mix)	11141-16-5	1000 µg/mL in Hexane	C-232S-H-10X
Aroclor 1242 (Tech Mix)	53469-21-9	1000 µg/mL in Hexane 50 mg	C-242S-H-10X C-242N-50MG
Aroclor 1248 (Tech Mix)	12672-29-6	1000 µg/mL in Hexane 50 mg	C-248S-H-10X C-248N-50MG
Aroclor 1254 (Tech Mix)	11097-69-1	1000 µg/mL in Hexane 50 mg	C-254S-H-10X C-254N-50MG
Aroclor 1260 (Tech Mix)	11096-82-5	1000 µg/mL in Hexane 50 mg	C-260S-H-10X C-260N-50MG
Aroclor 1262 (Tech Mix)	37324-23-5	1000 µg/mL in Hexane 50 mg	C-262S-H-10X C-262N-50MG
Aroclor 1268 (Tech Mix)	11100-14-4	1000 µg/mL in Hexane	C-298S-H-10X
Aroclor 5432 (Tech Mix)	63496-31-1	35 µg/mL in Toluene	T-432S
Aroclor 5442 (Tech Mix)	12642-23-8	35 µg/mL in Toluene	T-442S
Aroclor 5460 (Tech Mix)	11126-42-4	35 µg/mL in Toluene	T-440S
Aroclor 6050 (Tech Mix)		35 µg/mL in Toluene	T-6050S
Decabromodiphenyl ether	1163-19-5	50 µg/mL in Isooctane:Toluene	BDE-209S
Firemaster BP4A (4,4'-(1-methylethylidene) bis (2,6-dibromophenol))	79-94-7	100 µg/mL in Toluene	FRS-006S
Halowax 1013 (56 %Cl)	1321-64-8	100 µg/mL in Methanol	N-1013S
Halowax 1014 (62 %Cl)	1335-87-1	100 µg/mL in Methanol	N-1014S
Halowax 1051 (70 %Cl)	2234-13-1	100 µg/mL in Methanol	N-1051S
Halowax 1099 (52 %Cl)	39450-05-0	100 µg/mL in Methanol	N-1099S
2,2',3,4,4',5',6-Heptabromodiphenyl ether	207122-16-5	50 µg/mL in Isooctane	BDE-183S
2,2',4,4'-Tetrabromodiphenyl ether	40088-47-9	50 µg/mL in Isooctane	BDE-047S
2,2',4,4',5-Pentabromodiphenyl ether	60348-60-9	50 µg/mL in Isooctane	BDE-099S
2,2',4,4',5,5'-Hexabromodiphenyl ether	36483-60-0	50 µg/mL in Isooctane	BDE-153S
2,2',4,4',5,6'-Hexabromodiphenyl ether	207122-15-4	50 µg/mL in Isooctane	BDE-154S
2,2',4,4',6-Pentabromodiphenyl ether	189084-64-8	50 µg/mL in Isooctane	BDE-100S
m-Terphenyl	92-06-8	100 mg	T-002N
o-Terphenyl	84-15-1	100 mg	T-001N
p-Terphenyl	92-94-4	100 mg	T-003N
Tetradecachloro-m-terphenyl	42429-88-9	35 µg/mL in Toluene	T-005S
Tetradecachloro-o-terphenyl		35 µg/mL in Toluene	T-004S
Tetradecachloro-p-terphenyl		35 µg/mL in Toluene	T-006S
Triethylphosphate	78-40-0	50 mg	PLAS-PL-067N

PolyAdd  Check™



Plastic Additives

Trade-named products are usually technical mixtures.

Plasticizers

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Benzoflex® 2-45	Diethylene glycol dibenzoate	120-55-8	PLAS-PL-015N	PLAS-PL-015S
Bisphenol A (BPA)	4,4'-Dihydroxy-2,2'-diphenylpropane	80-05-7		M-1626-01S
Celogen® SD-125	50% Azodicarbonamide in a phthalate plasticizer		PLAS-PL-009N	PLAS-PL-009S
Citroflex® 2	2-Hydroxy-1,2,3-propanetricarboxylic acid, triethyl ester	77-93-0	PLAS-PL-028N	PLAS-PL-028S
Citroflex 4	2-Hydroxy-1,2,3-propanetricarboxylic acid, tributyl ester	77-94-1	PLAS-PL-030N	PLAS-PL-030S
Citroflex A-2	2-(Acetoxy)-1,2,3-propanetricarboxylic acid, triethyl ester	77-89-4	PLAS-PL-001N	PLAS-PL-001S
Citroflex A-4	2-Acetoxy-1,2,3-propanetricarboxylic acid, tributyl ester	77-90-7	PLAS-PL-002N	PLAS-PL-002S
Citroflex B-6	n-Butyltri-n-hexyl citrate	82469-79-2	PLAS-PL-025N	PLAS-PL-025S
Cresyl diphenyl phosphate	(4-Methylphenyl) diphenyl phosphate	26444-49-5	PLAS-PL-059N	-----
Dibutyl phthalate		84-74-2	PLAS-PL-013N	PLAS-PL-013S
Dibutyl sebacate	Dimethyl decanedioate	109-43-3	PLAS-PL-062N	-----
Diisooctyl phthalate	bis(6-Methylheptyl)benzene-1,2-dicarboxylate	27554-26-3	PLAS-PL-071N	-----
Dimethyl adipate	Dimethyl hexanedioate	627-93-0	PLAS-PL-070N	-----
Dimethyl sebacate	Dimethyl decanedioate	106-79-6	PLAS-PL-061N	-----
Diocetyl phthalate (DOP)		117-81-7	PLAS-PL-019N	PLAS-PL-019S
Disflamoll® TKP	Tricresyl phosphate	1330-78-5	PLAS-PL-053N	-----
Disflamoll® TP	Triphenyl phosphate	115-86-6	PLAS-PL-069N	-----
2-Ethylhexyl sebacate	bis(2-Ethylhexyl) decanedioate	122-62-3	PLAS-PL-064N	-----
Bis(2-Ethylhexyl) terephthalate	bis(2-Ethylhexyl) benzene-1,4-dicarboxylate	6422-86-2	PLAS-PL-065N	-----
Hercoflex® 900	1,3-Isobenzofurandione, polymer with 2,2'-(1,2-ethanedilyl)bis(oxy)) bis(ethanol), benzoate	68186-30-1	PLAS-PL-038N	PLAS-PL-038S
Hi-Point® PD-1	Methyl ethyl ketone peroxide solution	1338-23-4	PLAS-PL-024N	PLAS-PL-024S
Jayflex® 77	Diisooheptyl phthalate	71888-89-6	PLAS-PL-017N	PLAS-PL-017S
Jayflex DIDP	Diisodecyl phthalate	68515-49-1	PLAS-PL-016N	PLAS-PL-016S
Jayflex DINP	Diisononyl phthalate	68515-48-0	PLAS-PL-018N	PLAS-PL-018S
Jayflex DTDP	Diisotridecyl phthalate	68515-47-9	PLAS-PL-020N	PLAS-PL-020S
Jayflex L11P-E	Diundecyl phthalate	3648-20-2	PLAS-PL-021N	PLAS-PL-021S
Jayflex TINTM	Trisononyl trimellitate	53894-23-8	PLAS-PL-029N	PLAS-PL-029S
Laurex®	Zinc salt of lauric and related fatty acids		PLAS-PL-032N	PLAS-PL-032S
Markstat® 51	Poly(ethylene glycol) monolaurate	9004-81-3	PLAS-PL-003N	PLAS-PL-003S
Methyl O-Acetylricinoleate	Methyl (Z)-12-acetyloxyoctadec-9-enoate	140-03-4	PLAS-PL-063N	-----
Morfex® 150	Dicyclohexyl phthalate	84-61-7	PLAS-PL-014N	PLAS-PL-014S
Morfex 190	Butylphthalyl butyl glycolate	85-70-1	PLAS-PL-008N	PLAS-PL-008S
Morfex 560	Tri-n-hexyl trimellitate	1528-49-0	PLAS-PL-031N	PLAS-PL-031S
Morfex x-1125	Di(tridecyl) phthalate	119-06-2	PLAS-PL-033N	PLAS-PL-033S
Paraplex® G-30	Proprietary dibasic acid polyester mixture		PLAS-PL-027N	PLAS-PL-027S
Plasthall® DINP	Diisononyl phthalate	28553-12-0	PLAS-PL-072N	-----
Plasthall® ESO	Epoxidized soybean oil	8013-07-8	PLAS-PL-035N	-----
Polycizer® butyl oleate	Butyl oleate	142-77-8	PLAS-PL-007N	PLAS-PL-007S
Polycizer DP 500	Dipropylene glycol dibenzoate	27138-31-4	PLAS-PL-011N	PLAS-PL-011S
Santicizer® 141	2-Ethylhexyldiphenyl phosphate	1241-94-7	PLAS-PL-026N	PLAS-PL-026S
Santicizer 148	Mixture: isodecylidiphenyl phosphate (80-90%) / diisodecyl phenyl phosphate / triphenyl phosphate	29761-21-5	PLAS-PL-022N	PLAS-PL-022S
Santicizer 160	Benzyl butyl phthalate	85-68-7	PLAS-PL-004N	PLAS-PL-004S
Santicizer 261	Benzyl octyl phthalate	68515-40-2	PLAS-PL-005N	PLAS-PL-005S
Santicizer® 278	Benzyl 3-isobutyryloxy-1-isopropyl-2,2-dimethylpropyl phthalate	16883-83-3	PLAS-PL-074N	PLAS-PL-074S
Tributylphosphate	Tributyl phosphate	126-73-8	PLAS-PL-068N	-----
2,2,4-Trimethyl-1,3-pentanediol-isobutyrate		25265-77-4	PLAS-PL-066N	-----
Trimellitate	1,2,4-Benzenetricarboxylic acid, tris(2-ethylhexyl) ester	3319-31-1	PLAS-PL-060N	-----
Vinsol® powder	Gum rosin	8050-09-7	PLAS-PL-037N	PLAS-PL-037S-D
Vinsol® resin	Gum rosin	8050-09-7	PLAS-PL-036N	PLAS-PL-036S-D

Processing Aids

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Akrochem® Ceresin Wax		8001-75-0	PLAS-PA-002N	-----
Kemamide® E ultra	Erucamide	112-84-5	PLAS-PA-001N	PLAS-PA-001S

Retarders

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Akrochem® Retarder BAX		65-85-0	PLAS-RT-011N	-----
2-Cyano-2-propyl benzodithioate		201611-85-0	PLAS-RT-002N	PLAS-RT-002S ☆
2-Cyano-2-propyl dodecyl trithiocarbamate		870196-83-1	PLAS-RT-004N	PLAS-RT-004S
4-Cyano-4-[(dodecylsulfanylthiocarbonyl)sulfanyl]pentanoic acid		870196-80-8	PLAS-RT-005N	PLAS-RT-005S
4-Cyano-4-(phenylcarbonothioylthio)pentanoic acid		201611-92-9	PLAS-RT-003N	PLAS-RT-003N
Cyanomethyl dodecyl trithiocarbonate		796045-97-1	PLAS-RT-006N	PLAS-RT-006S
Cyanomethyl methyl(phenyl)carbamoithioate		76926-16-4	PLAS-RT-009N	-----
2-(Dodecylthiocarbonothioylthio)-2-methylpropionic acid		461642-78-4	PLAS-RT-010N	PLAS-RT-010S
bis(dodecylsulfanylthiocarbonyl) disulfide		870532-86-8	PLAS-RT-008N	PLAS-RT-008S
Retarder AK	Phthalic anhydride	85-44-9	PLAS-RT-001N	PLAS-RT-001S ☆
bis(thiobenzoyl) disulfide		5873-93-8	PLAS-RT-007N	PLAS-RT-007S



Solutions at 1000 µg/mL in Hexane, except where indicated

☆ Hexane:Acetone, -A Acetone, -T Toluene, -M Methanol, -DMSO, -D Dichloromethane -CN Acetonitrile

Stearates

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Stearic acid RG (rubber grade)	Stearic acid	57-11-4	PLAS-ST-001N	PLAS-ST-001S
Stearic acid TP	Stearic acid	57-11-4	PLAS-ST-002N	PLAS-ST-002S

UV Stabilizers

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
2-(2-Hydroxy-5-methylphenyl)benzotriazole		2440-22-4???	PLAS-UV-006N	PLAS-UV-006S-CN
2-(5-tert-Butyl-2-hydroxyphenyl)benzotriazole		3147-76-0	PLAS-UV-007N	PLAS-UV-007S-CN
2-(2H-Benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)phenol		70321-86-7	PLAS-UV-008N	PLAS-UV-008S-CN
2-tert-Butyl-6-(5-chloro-2H-benzotriazol-2-yl)-4-methylphenol		3896-11-5	PLAS-UV-009N	PLAS-UV-009S-CN
2-(3,5-Di-tert-butyl-2-hydroxyphenyl)2H-benzotriazole		3846-71-7	PLAS-UV-010N	PLAS-UV-010S-CN
2,4-Di-tert-butyl-6-(5-chloro-2H-benzotriazol-2-yl)phenol		3864-99-1	PLAS-UV-011N	PLAS-UV-011S-CN
2-(2H-Benzotriazol-2-yl)-4,6-di-tert-pentylphenol		25973-55-1	PLAS-UV-012N	PLAS-UV-012S-CN
2-(2-Hydroxy-5-tert-octylphenyl)benzotriazole		3147-75-9	PLAS-UV-013N	PLAS-UV-013S-CN
2-(3-sec-Butyl-5-tert-butyl-2-hydroxyphenyl)benzotriazole		36437-37-3	PLAS-UV-014N	PLAS-UV-014S-CN
2-(2H-Benzotriazol-2-yl)-4-methyl-6-(2-propenyl)phenol		2170-39-0	PLAS-UV-015N	PLAS-UV-015S-CN
UV Stabilizers Solution Set		Set of the above	PLAS-UV-STAB-SET	10 x 1 mL
Tinuvin® PED	2-(2-Hydroxy-5-methylphenyl)benzo triazole	2440-22-4	PLAS-UV-005N	PLAS-UV-005S
Uvinul® 3000	2,4-Dihydroxybenzophenone	131-56-6	PLAS-UV-001N	PLAS-UV-001S
Uvinul 3008	2-Hydroxy-4-octyloxybenzophenone	1843-05-6	PLAS-UV-002N	PLAS-UV-002S
Uvinul 3040	2-Hydroxy-4-methoxybenzophenone	131-57-7	PLAS-UV-003N	PLAS-UV-003S
Uvinul 3049	2,2-Dihydroxy-4,4-dimethoxybenzophenone	131-54-4	PLAS-UV-004N	PLAS-UV-004S

Vegetable Oils

Trade Name	Chemical Name	CAS No.	Neat (50 mg)	Solution (1 mL)
Akrofax™ A	Vulcanized vegetable oil		PLAS-VA-001N	-----
Akrofax B	Vulcanized vegetable oil		PLAS-VA-002N	-----

Deuterated Phthalates

Trade Name	Chemical Name	CAS No.	Neat	5 mg	Solution (1 mL)
Dibenzyl phthalate-d ₄			PHTH-D4-001N		PHTH-D4-001S
Di-n-butyl phthalate-d ₄		93952-11-5	PHTH-D4-002N		PHTH-D4-002S
Di-iso-butyl phthalate-3,4,5,6-d ₄		358730-88-8	PHTH-D4-003N		PHTH-D4-003S
Dicyclohexyl phthalate-3,4,5,6-d ₄		358731-25-6	PHTH-D4-004N		PHTH-D4-004S
Diethyl phthalate-3,4,5,6-d ₄		93952-12-6	PHTH-D4-005N		PHTH-D4-005S
Di-n-hexyl phthalate-3,4,5,6-d ₄			PHTH-D4-006N		PHTH-D4-006S
Dimethyl phthalate-3,4,5,6-d ₄		93951-89-4	PHTH-D4-007N		PHTH-D4-007S
Di-n-octyl phthalate-3,4,5,6-d ₄		93952-13-7	PHTH-D4-008N		PHTH-D4-008S
Di-n-pentyl phthalate-3,4,5,6-d ₄		358730-89-9	PHTH-D4-009N		PHTH-D4-009S
Di-n-propyl phthalate-3,4,5,6-d ₄		358731-29-0	PHTH-D4-010N		PHTH-D4-010S
bis(2-Ethylhexyl) phthalate-3,4,5,6-d ₄		93951-87-2	PHTH-D4-011N		PHTH-D4-011S
Sets of Deuterated Phthalates			PHTH-D4N-SET	PHTH-D4S-SET	
			11 x 5 mg		11 x 1 mL
Deuterated Phthalate Solutions in MeOH					

ASTM Method D6042-92 Plastic Packaging Testing Standards

This method is used by both pharmaceutical companies and plastics manufacturers. The test ensures the quality of the plastic product during the manufacturing process, and as delivered to the pharmaceutical customer. Compounds are often added to the method's analyte list by pharmaceutical companies.

Calibration Mix

PLAS-CAL-001
PLAS-CAL-001-PAK **SAVE**
 50 µg/mL each in Isopropanol

BHT	Irganox 3114
Erucamide Slip	Irganox 1010
Vitamin E	Irganox 1076
Irgafos 168	

Internal Standard Mix

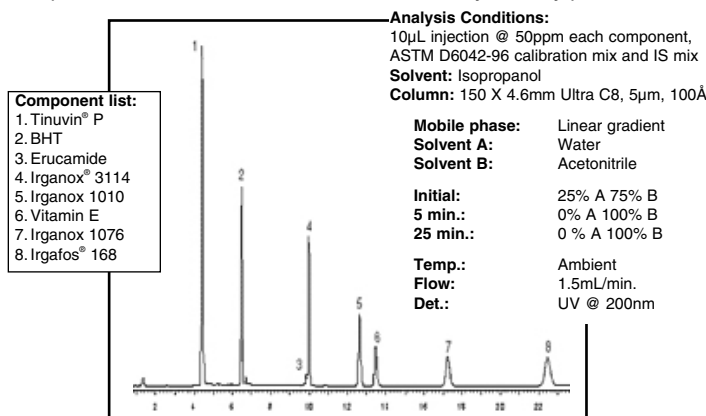
PLAS-IS-001
PLAS-IS-001-PAK **SAVE**
 51.8 µg/mL in Isopropanol

Tinuvin P

Expanded List of Additives

Each at 50 µg/mL in Isopropanol

Ultrinox 626	PLAS-CAL-002-1	1 mL	Ethanox 702	PLAS-CAL-002-5	1 mL
Santanox R	PLAS-CAL-002-2	1 mL	Ethanox 703	PLAS-CAL-002-6	1 mL
Ethanox 330	PLAS-CAL-002-3	1 mL	Irganox 1035	PLAS-CAL-002-7	1 mL
Ethanox 323	PLAS-CAL-002-4	1 mL			



The figure shows the separation of the compounds on the method's analyte list, as analyzed by our HPLC specialists. The primary calibration standard mixture contains the common antioxidants and slips listed in ASTM D6042-96.



Bisphenol Analog, Imidazole, Melamine, EFSA

Bisphenol Analog Standards



Bisphenol A (2,2'-bis(4-hydroxyphenyl)propane, BPA) has been used in commercial and industrial applications since the 1970's. It has been the subject of numerous toxicological studies due to human exposure from leachate originating from polycarbonate plastics and epoxy-lined food and drink containers. Analogs of BPA have been the subject of recent health-related studies.



Compound	CAS	NEAT Cat. No.	Unit	SOLUTION Cat. No.	10 µg/mL in MeOH Unit
Bisphenol A diglycidyl ether (BADGE)	1675-54-3	BADGE-001N	50 mg	BADGE-001S	1 mL
Bisphenol A (BPA)	80-05-7	BPA-A-N	50 mg	BPA-A-S	1 mL
Bisphenol AF	1478-61-1	BPA-AF-N	50 mg	BPA-AF-S	1 mL
Bisphenol AP	1571-75-1	BPA-AP-N	50 mg	BPA-AP-S	1 mL
Bisphenol B	77-40-7	BPA-B-N-10MG	10 mg	BPA-B-S	1 mL
Bisphenol BP NEW	1844-01-5	BPA-BP-N	50 mg	BPA-BP-S	1 mL
Bisphenol C NEW	79-97-0	BPA-C-N	50 mg	BPA-C-S	1 mL
Bisphenol C-dichloride NEW	14868-03-2	BPA-C2-N	20 mg	BPA-C2-S	1 mL
Bisphenol E NEW	2081-08-5	BPA-E-N	50 mg	BPA-E-S	1 mL
Bisphenol F	620-92-8	BPA-F-N-10MG	10 mg	BPA-F-S	1 mL
Bisphenol G NEW	127-54-8	BPA-G-N	20 mg	BPA-G-S	1 mL
Bisphenol M NEW	13595-25-0	BPA-M-N	20 mg	BPA-M-S	1 mL
Bisphenol P	2167-51-3	BPA-P-N	50 mg	BPA-P-S	1 mL
Bisphenol PH NEW	24038-68-4	BPA-PH-N	20 mg	BPA-PH-S	1 mL
Bisphenol S	80-09-1	BPA-S-N	50 mg	BPA-S-S	1 mL
Bisphenol TMC NEW	129188-99-4	BPA-TMC-N-10MG	10 mg	BPA-TMC-S	1 mL
Bisphenol Z	843-55-0	BPA-Z-N	50 mg	BPA-Z-S	1 mL

Imidazole Standards (caramel coloring)



Over the past several years, there has been increased scrutiny of the caramel coloring used in food products, particularly cola-type soft drinks. There is concern for 4-methyl imidazole (4-MEI) that is created during the caramel coloring synthesis process. The concern arises because 4-MEI has been reported to be carcinogenic in high doses.

Compound	CAS	NEAT Cat. No.	Unit	SOLUTION Cat. No.	100 µg/mL in Toluene Unit
4-Methylimidazole (4-MEI)	822-36-6	FAC-001N	100 mg	FAC-001S-T	1 mL
1-Methylimidazole	616-47-7	FAC-002N	100 mg	FAC-002S-T	1 mL
2-Ethylimidazole	1072-62-4	FAC-003N	100 mg	FAC-003S-T	1 mL
2-Methylimidazole	693-98-1	FAC-004N	100 mg	FAC-004S-T	1 mL
4(5)-(Hydroxymethyl)imidazole	822-55-9	FAC-005N-25MG	25 mg	FAC-005S-T	1 mL
Quinoline	91-22-5	-----	-----	FAC-IS-T	1 mL



Imidazole Solution Set

FAC-SET 6 x 1 mL

Melamine Kit

Analysis for Melamine in pet food, formula milk, and other foodstuffs can now be more accurate and reliable with the Melamine Reference Standards Set: Melamine, Ammeline, Ammelide, Cyanuric acid, the method recommended Internal Standard, a column clean-up solution, and a Silylating Reagent. Storage Cond. (0-5°C)

FDA-PROP-001-SET 5 x 1 mL, 2 x 5 mL

		Cat. No.	1 mL
Melamine	1000 µg/mL in Diethylamine:Water (20:80)	FDA-PROP-001A	
Ammeline	1000 µg/mL in Diethylamine:Water (20:80)	FDA-PROP-001B	
Ammelide	1000 µg/mL in Diethylamine:Water (20:80)	FDA-PROP-001C	
Cyanuric acid	1000 µg/mL in Diethylamine:Water (20:80)	FDA-PROP-001D	

Internal Standard

FDA-PROP-001-IS 1 x 1 mL

1000 µg/mL in Pyridine

2,6-Diamino-4-chloropyrimidine

Silylating Reagent

FDA-PROP-001-DER 1 x 5 mL

BSTFA [bis(trimethylsilyl)trifluoroacetamide] 99
TMCS 1

Column Clean-up Check

FDA-PROP-001-CHK 1 x 5 mL

vol/vol%
Sylon BFT 50
Pyridine 50

EFSA for Isopropylthioxanthone (ITX)

Responding to the hazard found in Italy, France, Spain, and Portugal, we have formulated Isopropylthioxanth-9-one (a photographic chemical) found in baby milk in Italy. The 2-isomer as well as the technical mixture also contains the 4-isomer.

2-Isopropylthioxanthone (ITX)

EFSA-ITX-01 1 x 1 mL

1.0 mg/mL in Isooctane

2-Isopropylthioxanth-9-one

Isopropylthioxanthone (ITX) mixed isomers

EFSA-ITX-02 1 x 1 mL

1.0 mg/mL in Isooctane

2-and 4-Isopropylthioxanth-9-one

Food Analysis

Food Constituents, Lipid Standards



Food chemists routinely use AccuStandard's analytical reference standards for their food analysis. These include lipid, vitamin, preservative and antimicrobial standards. Each standard is methodically prepared, undergoes various quality control analyses and procedures and is then packaged under the strict guidelines of our ISO Guide 34, 17025 and 9001 Quality System.



Food Analysis Contents	92-97
Unsaturated Methyl Esters	93
Saturated Methyl Esters	94
Saturated Glycerides	94
Unsaturated Glycerides	94
AOCS, Method Ce1-62	95
NIH Profiling Mixes	95
FAME Mixes	96
Vitamins	97
Preservatives and Antimicrobials	107

- High Purity confirmed by GLC & TLC
- Packaged in Sealed Ampules under Nitrogen Blanket

- Certificate of Analysis

Unsaturated Methyl Esters

99% minimum purity Compound	(Storage: -20°C, protect from light) CAS No.	Neat 100 mg	Each 10 mg/mL in Heptane Solution 1 mL
Methyl cis-9-hexadecenoate (<i>Palmitoleate</i>) C16:1	1120-25-8	UFA-001N	UFA-001S
Methyl trans-9-hexadecenoate C16:1	10030-74-7	UFA-002N	UFA-002S
Methyl cis-6-octadecenoate (<i>Petroselinic</i>) C18:1	2777-58-4	UFA-003N	UFA-003S
Methyl trans-6-octadecenoate (<i>Petroselaidic</i>) C18:1		UFA-004N	UFA-004S
Methyl cis-9-octadecenoate (<i>Oleic</i>) C18:1	112-62-9	UFA-005N	UFA-005S
Methyl trans-9-octadecenoate (<i>Elaidic</i>) C18:1	2462-84-2	UFA-006N	UFA-006S
Methyl cis-11-octadecenoate (<i>Vaccenic</i>) C18:1	1937-63-9	UFA-007N	UFA-007S
Methyl 12-hydroxy-cis-9-octadecenoate (<i>Ricinoleic</i>) C18:1	141-24-2	UFA-008N	UFA-008S
Methyl linoleate (<i>Linoleic</i>) C18:2	112-63-0	UFA-010N	UFA-010S
Methyl linolelaidate (<i>Linoelaidic</i>) C18:2	2566-97-4	UFA-011N	UFA-011S
Methyl octadecadienoate (<i>Conjugated</i>) C18:2		UFA-012N *	UFA-012S
Methyl linolenate (<i>Linolenic</i>) C18:3	301-00-8	UFA-014N *	UFA-014S
Methyl g-linolenate (<i>Gamma Linolenic</i>) C18:3	16326-32-2	UFA-015N *	UFA-015S
Methyl trans-11-eicosenoate C20:1	69119-90-0	UFA-016N	UFA-016S
Methyl cis-8-eicosenoate C20:1	69119-99-9	UFA-017N	UFA-017S
Methyl cis-11-eicosenoate C20:1	2390-09-2	UFA-018N	UFA-018S
Methyl cis-5-eicosenoate C20:1	20839-34-3	UFA-019N	UFA-019S
Methyl cis-11,14-eicosadienoate C20:2	2463-02-7	UFA-020N *	UFA-020S
Methyl cis-8,11,14-eicosatrienoate (<i>Homogamma linolenic</i>) C20:3	21061-10-9	UFA-022N *	UFA-022S *
Methyl cis-11,14,17-eicosatrienoate C20:3	55682-88-7	UFA-023N *	UFA-023S *
Methyl arachidonate (<i>Arachidonic</i>) C20:4	2566-89-4	UFA-024N *	UFA-024S
Methyl 5,8,11,14,17-Eicosapentaenoate C20:5	2734-47-6	UFA-025N *	UFA-025S *
Methyl cis-7,10,13,16,19-Docosapentaenoate (DPA) C22:5	108698-02-8	UFA-026N *	UFA-026S *
Methyl cis-13-docosenoate (<i>Erucic</i>) C22:1	1120-34-9	UFA-027N	UFA-027S
Methyl trans-13-docosenoate (<i>Brassicidic</i>) C22:1	7439-44-3	UFA-028N	UFA-028S
Methyl cis-13,16-docosadienoate C22:2	61012-47-3	UFA-029N *	UFA-029S
Methyl cis-13,16,19-docosatrienoate C22:3	108698-01-7	UFA-030N *	UFA-030S *
Methyl cis-7,10,13,16-Docosatetraenoate C22:4	13487-42-8	UFA-031N *	UFA-031S *
Methyl cis-4,7,10,13,16,19-Docosahexenoate C22:6	301-01-9	UFA-032N *	UFA-032S *
Methyl cis-15-tetracosenoate (<i>Nervonic</i>) C24:1	2733-88-2	UFA-033N	UFA-033S
Set of Unsaturated Fatty Acid Methyl Ester (UFA-001 to UFA-033)	1 x 30 units	UFA-N-SET *	UFA-S-SET *

* ColdPAK required to maintain integrity of product.

Lipid Standards analyzed by both GLC and TLC are supplied with complete analytical documentation.



Food Analysis

Lipid Standards

Saturated Methyl Esters

Compound	CAS No.	Neat 100 mg	10 mg/mL in Hexane Solution 1 mL
Methyloctanoate (<i>Caprylate</i>) C8:0	111-11-5	SFA-001N	SFA-001S
Methylnonoate (<i>Pelargonate</i>) C9:0	1731-84-6	SFA-002N	SFA-002S
Methyldecanoate (<i>Caprate</i>) C10:0	110-42-9	SFA-003N	SFA-003S
Methylundecanoate C11:0	1731-86-8	SFA-004N	SFA-004S
Methyldodecanoate (<i>Laurate</i>) C12:0	111-82-0	SFA-005N	SFA-005S
Methyltridecanoate C13:0	1731-88-0	SFA-006N	SFA-006S
Methyltetradecanoate (<i>Myristate</i>) C14:0	124-10-7	SFA-007N	SFA-007S
Methylpentadecanoate C15:0	7132-64-1	SFA-008N	SFA-008S
Methylhexadecanoate (<i>Palmitate</i>) C16:0	112-39-0	SFA-009N	SFA-009S
Methylheptadecanoate (<i>Margarate</i>) C17:0	1731-92-6	SFA-010N	SFA-010S
Methyloctadecanoate (<i>Stearate</i>) C18:0	112-61-8	SFA-011N	SFA-011S
Methyl 12-hydroxystearate C18:0	141-23-1	SFA-012N	SFA-012S
Methylnonadecanoate C19:0	1731-94-8	SFA-013N	SFA-013S
Methyleicosanoate (<i>Arachidate</i>) C20:0	1120-28-1	SFA-014N	SFA-014S
Methylheneicosanoate C21:0	6064-90-0	SFA-015N	SFA-015S
Methyldocosanoate (<i>Behenate</i>) C22:0	929-77-1	SFA-016N	SFA-016S
Methyltricosanoate C23:0	2433-97-8	SFA-017N	SFA-017S
Methyltetracosanoate (<i>Lignocerate</i>) C24:0	2442-49-1	SFA-018N	SFA-018S
Set of Saturated Fatty Acid Methyl esters (SFA-001 to SFA-018)	1 x 18 units	SFA-N-SET	SFA-S-SET

Technical Note

ColdPAKs may be recommended or required with certain temperature sensitive products. Some standards are susceptible to change at room temperature or higher. In some of these cases, we may recommend or require that these products ship in a "ColdPAK" (a styrofoam container that has an ice pack in it). The purpose is to delay the exposure of the product to higher temperatures, and NOT to keep the product frozen. The product will not immediately go out of specifications when the ColdPAK melts or when the product reaches room temperature. It simply delays exposure to higher temperatures. When a product is shipped with a ColdPAK, the customer should also consider requesting next-day delivery and should avoid having the shipment sent on a Friday unless it is approved for Saturday Delivery.

Glycerides

Saturated Glycerides

Compound	CAS No.	Neat 100 mg
Trioctanoin (<i>Caprylin</i>) C8:0	538-23-8	GS-001N
Dicaprylin C8:0	36354-80-0	GS-002N
Monocaprylin C8:0	19670-49-6	GS-003N
Tridecanoin (<i>Caprin</i>) C10:0	621-71-6	GS-004N
Dicaprin C10:0	53988-07-1	GS-005N
Monocaprin C10:0	26402-22-2	GS-006N
Tridodecanoin (<i>Laurin</i>) C12:0	538-24-9	GS-007N
Dilaurin C12:0	27638-00-2	GS-008N
Monolaurin C12:0	142-18-7	GS-009N
Tritetradecanoin (<i>Myristin</i>) C14:0	555-45-3	GS-010N
Dimyristin C14:0	53563-63-6	GS-011N
Monomyristin C14:0	589-68-4	GS-012N
Trihexadecanoin (<i>Palmitin</i>) C16:0	555-44-2	GS-013N
Dipalmitin C16:0	26657-95-4	GS-014N
Monopalmitin C16:0	542-44-9	GS-015N
Trioctadecanoin (<i>Stearin</i>) C18:0	555-43-1	GS-016N
Distearin C18:0	1323-83-7	GS-017N
Monostearin C18:0	22610-63-5	GS-018N
Trieicosanoin (<i>Arachidin</i>) C20:0	620-64-4	GS-019N
Diarachidin C20:0	60586-60-9	GS-020N
Monoarachidin C20:0		GS-021N
Tridocosanoin (<i>Behenin</i>) C22:0	18641-57-1	GS-022N
Dibehenin C22:0		GS-023N
Monobehenin C22:0	6916-74-1	GS-024N
Set of Saturated glyceride (GS-001 to GS-024)	1 x 24 units	GS-SET

Unsaturated Glycerides

Compound	CAS No.	Neat 10 mg
Myristolein C14:1 cis		UG-001N
Dimyristolein C14:1		UG-002N
Monomyristolein C14:1	56399-71-4	UG-003N
Palmitolein C16:1 cis	20246-55-3	UG-004N
Dipalmitolein C16:1	113728-10-2	UG-005N
Monopalmitolein C16:1	37515-61-0	UG-006N
Petroselinin 6 C18:1 cis	3296-43-3	UG-007N
Dipetroselinin 6 C18:1		UG-008N
Monopetroselinin 6 C18:1		UG-009N
Olein 9 C18:1 cis	122-32-7	UG-010N
Diolen 9 C18:1	25637-84-7	UG-011N
Monolein 9 C18:1	111-03-5	UG-012N
Trielaidin 9 C18:1 trans	537-39-3	UG-013N
Dielaidin 9 C18:1 trans	98168-52-6	UG-014N
Monoelaidin 9 C18:1 trans	2716-53-2	UG-015N
Vaccenin 11 C18:1 cis		UG-016N
Divaccenin 11 C18:1		UG-017N
Monovaccenin 11 C18:1		UG-018N
Linolein C18:2 cis,cis	537-40-6	UG-019N *
Dilinolein C18:2	30606-27-0	UG-020N *
Monolinolein C18:2	2277-28-3	UG-021N *
Linolenin C18:3 cis,cis,cis	14465-68-0	UG-022N *
Dilinoenin C18:3		UG-023N *
Monolinolenin C18:3	75685-75-5	UG-024N *
Gamma linolenin C18:3 cis,cis,cis		UG-025N *
Gamma di-linolenin C18:3		UG-026N *
Gamma mono-linolenin C18:3		UG-027N *
Triecosenoin C20:1 cis	80380-39-8	UG-028N
Dieicosenoin C20:1	102783-82-4	UG-029N
Monoeicosenoin C20:1		UG-030N
11-14 cis Trieicosadienoin C20:2 cis,cis		UG-031N *
Dieicosadienoin C20:2		UG-032N *
Monoeicosadienoin C20:2		UG-033N *
Set of Unsaturated Glyceride (UFA-001 to UFA-033)	1 x 33 units	UG-N-SET *

(Storage: -20°C, protect from light)

Lipid Standards analyzed by both GLC and TLC are supplied with complete analytical documentation.

* ColdPAK required to maintain integrity of product.



AOCS, Method Ce1-62 Animal & Vegetable Reference Mixes

AOCS Animal & Vegetable Reference Neat Mixtures		Cat. No.	Unit
Mix 1: Suitable standard for corn, cottonseed, kapok, poppyseed, rice, safflower, sesame, soybean, sunflower and walnut oils		AOCS-001N *	100 mg
Mix 2: Suitable standard for hempseed, linseed, perrilla & rubberseed oils		AOCS-002N *	100 mg
Mix 3: Suitable standard for mustard seed, peanut and rapeseed oil		AOCS-003N *	100 mg
Mix 4: Suitable standard for neatsfoot, olive and teaseed oils		AOCS-004N *	100 mg
Mix 5: Suitable standard for babassu, coconut, ouri-curi & palm kernel oils		AOCS-005N *	100 mg
Mix 6: Suitable standard for lard, beef tallow, mutton tallow and palm oil		AOCS-006N *	100 mg
AOCS Rapeseed Mix, Suitable standard for modern low erucic acid oils		AOCS-007N *	100 mg
AOCS Animal & Vegetable Reference Mix Set (AOCS-001N to AOCS-007N)		AOCS-SET *	7 x 100 mg

		Methyl Ester (% Composition by Weight)														
		C8:0 Caprylate	C10:0 Caprate	C12:0 Laurate	C14:0 Myristate	C16:0 Palmitate	C16:1 Palmitoleate	C18:0 Stearate	C18:1 Oleate	C18:2 Linoleate	C18:3 Linolenate	C20:0 Arachidate	C20:1 Eicosenoate	C22:0 Behenate	C22:1 Erucate	C24:0 Lignocerate
AOCS Reference Mix	Cat. No.															
RM-1 	AOCS-001N					6.0		3.0	35.0	50.0	3.0	3.0				
RM-2 	AOCS-002N					7.0		5.0	18.0	36.0	34.0					
RM-3 	AOCS-003N				1.0	4.0		3.0	45.0	15.0	3.0	3.0		3.0	20.0	3.0
RM-4 	AOCS-004N					11.0		3.0	80.0	6.0						
RM-5 	AOCS-005N	7.0	5.0	48.0	15.0	7.0		3.0	12.0	3.0						
RM-6 	AOCS-006N				2.0	30.0	3.0	14.0	41.0	7.0	3.0					
Rapeseed 	AOCS-007N				1.0	4.0		3.0	60.0	12.0	5.0	3.0	1.0	3.0	5.0	3.0

NHI/NIH Fatty Acid Methyl Ester Profiling Mixes

Designed to test reliability of chromatographic system when performing quantitative analysis of Fatty Acids.

		Methyl Ester (% Composition by Weight)										
		C8:0 Caprylate 100 mg	C10:0 Caprate	C12:0 Laurate	C14:0 Myristate	C16:0 Palmitate	C16:1 Palmitoleate	C18:0 Stearate	C18:1 Oleate	C20:0 Arachidate	C22:0 Behenate	C24:0 Lignocerate
NHI/NIH Reference Mix	Cat. No.											
NHI-A	NHI-001N					25.0	10.0		65.0			
NHI-B	NHI-002N					4.0	40.0		56.0			
NHI-C *	NHI-003N		1.5	3.0	6.0	12	19.4		24.9		33.2	
NHI-D	NHI-004N					11.8	23.6	6.9	13.1	44.6		
NHI-E	NHI-005N		6.3	9.1	12.0	23.3	49.2					
NHI-F *	NHI-006N					2.5	4.2		7.3		13.6	25.4
NHI-SET *	6 x 100 mg (NHI-001N to NHI-006N)											47.0

* ColdPAK required to maintain integrity of product.



Food Analysis

FAMES

Fatty Acid Methyl Esters (FAMES)

These mixes and kits are suitable for determining peak identification & establishing chromatographic retention times.

Saturated Straight Chain Kit

FAME-001-R1-KIT 10 units

Methyl esters, purity 99%, 100 mg each

Me Caproic acid (C6:0)
Me Caprylic acid (C8:0)
Me Capric acid (C10:0)
Me Lauric acid (C12:0)
Me Myristic acid (C14:0)
Me Palmitic acid (C16:0)
Me Stearic acid (C18:0)
Me Arachidic acid (C20:0)
Me Behenic acid (C22:0)
Me Lignoceric acid (C24:0)

Saturated Straight Chain Kit

FAME-002-R1-KIT 19 units

Methyl esters, 99% purity, 100 mg each

Me Caproic acid (6:0)
Me Heptanoic acid (7:0)
Me Caprylic acid (8:0)
Me Nonanoic acid (9:0)
Me Capric acid (10:0)
Me Undecanoic acid (11:0)
Me Lauric Acid (12:0)
Me Tridecanoic acid (13:0)
Me Myristic acid (14:0)
Me Pentadecanoic acid (15:0)
Me Palmitic acid (16:0)
Me Heptadecanoic acid (17:0)
Me Stearic acid (18:0)
Me Nonadecanoic acid (19:0)
Me Arachidic acid (20:0)
Me Heneicosanoic acid (21:0)
Me Behenic acid (22:0)
Me Tricosanoic acid (23:0)
Me Lignoceric acid (24:0)

Odd Carbon Straight Chain Kit

FAME-005-R1-KIT 9 units

Methyl esters, 99+% purity, 100 mg each

Me Heptanoic acid (C7:0)
Me Nonanoic acid (C9:0)
Me Undecanoic acid (C11:0)
Me Tridecanoic acid (C13:0)
Me Pentadecanoic acid (C15:0)
Me Heptadecanoic acid (C17:0)
Me Nonadecanoic acid (C19:0)
Me Heneicosanoic acid (C21:0)
Me Tricosanoic acid (C23:0)

Unsaturated Straight Chain Kit

FAME-003-R1-KIT * 14 units

Storage -20°C, Protect from light

Saturated methyl esters, purity 99%, 10 mg each

Me Myristoleic acid (14:1)
Me Palmitoleic acid (16:1)
Me Petroselinic acid (18:1)
Me Elaidic acid (18:1)
Me cis-Vaccenic acid (18:1, cis)
Me Linoleic acid (18:2, cis)
Me Linolelaidic acid (18:2, trans)
Me Linolenic acid (18:3)
Me cis-11-Eicosenoic acid (20:1)
Me Arachidonic acid (20:4)
Me Erucic acid (22:1)
Me cis-4,7,10,13,16,19-Docosahexaenoic acid (22:6)
Me Nervonic acid (24:1)
Me Oleic acid (18:1)

Methyl Ester Mix #1

FAMQ-001 *

40 mg
4 comps.

Storage: -20°C, Protect from light

Approximately 10 mg of each in a qualitative mix

11-Eicosenoic acid methyl ester (20:1)
11,14-Eicosadienoic acid methyl ester (20:2)
Arachidonic acid methyl ester (20:4)
5,8,11,14,17-Eicosapentaenoic acid methyl ester (20:5)

Fatty Acid Methyl Ester Mix #2

FAMQ-002 *

50 mg
5 comps.

Storage: -20°C, Protect from light

Approximately 10 mg of each in a qualitative mix

11-Eicosenoic acid methyl ester (20:1)
11,14-Eicosadienoic acid methyl ester (20:2)
11,14,17-Eicosatrienoic acid methyl ester (20:3)
Arachidonic acid methyl ester (20:4)
5,8,11,14,17-Eicosapentaenoic acid methyl ester (20:5)

Volatile Acid Standard Solution

FAMQ-004

1 x 100 mL
10 comps.

Storage: Refrigerate

10mM of each component in deionized H₂O.

Formic acid
Acetic acid
Propionic acid
Isobutyric acid
Butyric acid
Isovaleric acid
n-Valeric acid
Isocaproic acid (4-Methyl valeric acid)
Hexanoic acid (n-Caproic acid)
Heptanoic acid

Standards of Interest

For FAME standards refer to BioFuels in the Petrochemical section.

FAME Quantitative Standard Mix

FAMQ-005 *

1 x 1 mL

Storage: -20°C, Protect from light

At stated conc. in CH₂Cl₂ (total of 10 mg/mL)

37 comps.

	mg/mL
Me Butyric acid (C4:0)	0.4
Me Caproic acid (C6:0)	0.4
Me Caprylic acid (C8:0)	0.4
Me Capric acid (C10:0)	0.4
Me Undecanoic acid (C11:0)	0.2
Me Lauric acid (C12:0)	0.4
Me Tridecanoic acid (C13:0)	0.2
Me Myristic acid (C14:0)	0.4
Me Myristoleic acid (C14:1)	0.2
Me Pentadecanoic acid (C15:0)	0.2
Me cis-10-Pentadecenoic acid (C15:1)	0.2
Me Palmitic acid (C16:0)	0.6
Me Palmitoleic acid (C16:1)	0.2
Me Heptadecanoic acid (C17:0)	0.2
Me cis-10-Heptadecenoic acid (C17:1)	0.2
Me Stearic acid (C18:0)	0.4
Me Elaidic acid (C18:1n9t)	0.2
Me Oleic acid (C18:1n9c)	0.4
Me Linolelaidic acid (C18:2n6t)	0.2
Me Linoleic acid (C18:2n6c)	0.2
Me Arachidic acid (C20:0)	0.4
Me g-Linolenic acid (C18:3n6)	0.2
Me cis-11-Eicosenoic acid (C20:1)	0.2
Me Linolenic acid (C18:3n3)	0.2
Me Heneicosanoic acid (C21:0)	0.2
Me cis-11,14-Eicosadienoic acid (C20:2)	0.2
Me Behenic acid (C22:0)	0.4
Me cis-8,11,14-Eicosatrienoic acid (C20:3n6)	0.2
Me Erucic acid (C22:1n9)	0.2
Me cis-11,14,17-Eicosatrienoic acid (C20:3n3)	0.2
Me Arachidonic acid (C20:4n6)	0.2
Me Tricosanoic acid (C23:0)	0.2
Me cis-13,16-Docosadienoic acid (C22:2)	0.2
Me Lignoceric acid (C24:0)	0.4
Me cis-5,8,11,14,17-Eicosapentaenoic acid (C20:5n3)	0.2
Me Nervonic acid (C24:1)	0.2
Me cis-4,7,10,13,16,19-Docosahexaenoic acid (C22:6n3)	0.2

* ColdPAK required to maintain integrity of product.



Neats as stated, Solutions in 1 mL

Fatty Acid Ethyl Esters

Compound	CAS No.	Conc.	Matrix	Cat. No.
Ethyl arachidate	18281-05-5	100 mg	NEAT	FAEE-008N
		10 mg/mL	Hexane	FAEE-008S
Ethyl behenate	5908-87-2	100 mg	NEAT	FAEE-009N
		10 mg/mL	Hexane	FAEE-009S
Ethyl caprate	110-38-3	100 mg	NEAT	FAEE-003N
		10 mg/mL	Hexane	FAEE-003S
Ethyl caprylate	106-32-1	100 mg	NEAT	FAEE-002N
		10 mg/mL	Hexane	FAEE-002S
Ethyl erucate	37910-77-3	100 mg	NEAT	FAEE-011N
		10 mg/mL	Hexane	FAEE-011S
Ethyl heptadecanoate	14010-23-2	100 mg	NEAT	FAEE-015N
		10 mg/mL	Hexane	FAEE-015S
Ethyl laurate	106-33-2	100 mg	NEAT	FAEE-004N
		10 mg/mL	Hexane	FAEE-004S
Ethyl lignocerate	24634-95-5	100 mg	NEAT	FAEE-010N
		10 mg/mL	Hexane	FAEE-010S
Ethyl linoleate	544-35-4	100 mg	NEAT	FAEE-012N
		10 mg/mL	Hexane	FAEE-012S
Ethyl linolenate	1191-41-9	100 mg	NEAT	FAEE-016N
		10 mg/mL	Hexane	FAEE-016S
Ethyl linolenate gamma	31450-14-3	100 mg	NEAT	FAEE-020N
		10 mg/mL	Hexane	FAEE-020S
Ethyl myristate	124-06-1	100 mg	NEAT	FAEE-005N
		10 mg/mL	Hexane	FAEE-005S
Ethyl nervonate	137888-64-3	100 mg	NEAT	FAEE-013N
		10 mg/mL	Hexane	FAEE-013S
Ethyl oleate	111-62-6	100 mg	NEAT	FAEE-014N
		10 mg/mL	Hexane	FAEE-014S
Ethyl palmitate	628-97-7	100 mg	NEAT	FAEE-006N
		10 mg/mL	Hexane	FAEE-006S
Ethyl palmitoleate	56219-10-4	100 mg	NEAT	FAEE-001N
		10 mg/mL	Hexane	FAEE-001S
Ethyl stearate	111-61-5	100 mg	NEAT	FAEE-007N
		10 mg/mL	Hexane	FAEE-007S

Vitamin Standards

Water Soluble					Fat Soluble				
Compound	Code	CAS No.	Unit	Cat. No.	Compound	Code	CAS No.	Unit	Cat. No.
Thiamine • HCL	B1	67-03-8	1 gram	VIT-001N	dl-alpha-Tocopherol	E	10191-41-0	100 mg	VIT-012N
Riboflavin	B2	83-88-5	1 gram	VIT-002N	Cholecalciferol	D3	67-97-0	100 mg	VIT-013N
Pyridoxine • HCL	B6	58-56-0	1 gram	VIT-003N	Retinol Palmitate	A, Palmitate	79-81-2	100 mg	VIT-014N
L-Ascorbic acid	C	50-81-7	1 gram	VIT-004N	dl-alpha-Tocopherol acetate		7695-91-2	100 mg	VIT-015N
Nicotinic acid	Niacin	59-67-6	1 gram	VIT-005N	Phylloquinone	K1	84-80-0	100 mg	VIT-016N
Nicotinamide		98-92-0	1 gram	VIT-006N	Menaquinone	K2	11032-49-8	100 mg	VIT-017N
Folic Acid	M	59-30-3	1 gram	VIT-007N	Menadione	K3	58-27-5	100 mg	VIT-018N
Calcium-D-pantothenate	B5	137-08-6	100 mg	VIT-008N	β-Carotene (Substantially free of alpha Carotene)		7235-40-7	10 mg	VIT-019N
d-Biotin	H	58-85-5	100 mg	VIT-009N-R1	d-alpha-Tocopherol succinate	E	4345-03-3	100 mg	VIT-020N
Cyanocobalamin	B12	68-19-9	25 mg	VIT-010N-R1	Ergocalciferol	D2	50-14-6	100 mg	VIT-022N
Water Soluble Vitamin Set					Fat Soluble Vitamin Set				
VIT-WSK-R1-SET					VIT-FSK-R2-SET				
Includes: VIT-001N to VIT-010N					Includes: VIT-012N to VIT-022N				

Preservative and Antimicrobial Standards

Compound	Purity	CAS No.	Unit	Cat. No.
Benzoic acid	99 %	65-85-0	1 gram	AP-001N
Sodium benzoate	99 %	532-32-1	1 gram	AP-002N
Potassium nitrite	97 %	7758-09-0	1 gram	AP-003N
Sodium nitrite	99 %	7632-00-0	1 gram	AP-004N
Sodium nitrate	99 %	7631-99-4	1 gram	AP-005N
Potassium nitrate	99 %	7757-79-1	1 gram	AP-006N
Methyl paraben	99 %	99-76-3	1 gram	AP-007N
Ethyl paraben	99 %	120-47-8	1 gram	AP-008N
Butyl paraben	99 %	94-13-3	1 gram	AP-009N
Propionic acid	99 %	79-09-4	1 gram	AP-010N
Sodium propionate	97 %	137-40-6	1 gram	AP-011N
Calcium propionate	97 %	4075-81-4	1 gram	AP-012N
Sorbic acid	99 %	110-44-1	1 gram	AP-013N
Potassium sorbate	99 %	590-00-1	1 gram	AP-014N
Preservative & Antimicrobial Set				AP-SET
Set includes: AP-001N through AP-014N				

Technical Note

Vitamin Standards are tested, packaged and stored under an ISO Guide 34, 17025 and 9001 Quality System. Always store Standards properly, away from light sources. Each Standard is provided with an actual lot analysis and additional transfer vial and label.



Allergens

It has been estimated that 10% of the U.S. population is affected by allergens. Cosmetic allergens can be found in everything from shampoos to skin creams. The average person is now exposed to significantly higher levels of these chemicals than people were exposed to only a generation ago. The resulting synergistic effect, coupled with environmental exposure to chemicals, is the focus of an ever-increasing number of studies.

Phthalates are a health issue as well as a food safety concern as an Indirect Food Additive. They tend to migrate from plastic containers and wrappings into food. Finally, some pesticides are a cosmetic ingredient issue since they can be present with other ingredients such as lanolin.

AccuStandard now offers AllergenCheck™ Standards to meet analytical requirements of the cosmetic, pharmaceutical and food industries. These new products coupled with the widest selection of certified reference materials for pesticide and pesticide metabolite analysis, offer one-stop shopping for the analysis of allergens.

Many of the Standards are synthesized by AccuStandard and are not available elsewhere. If you do not see the chemicals or their metabolites that you need, let us know and we may be able to synthesize them. Additionally, if a certain custom mixture of allergens would make your analysis easier, we can provide you with a custom formulation that will save you time.

Allergen Standards are listed as follows:

- Neats and Single Solutions listed alphabetically by compound
- Allergens regulated by the EU
- Allergen standards listed by type



AllergenCheck™

Neats as stated, Solutions in 1 mL

Allergens

Compound	CAS No.	Conc.	Matrix	Cat. No.
2-Acetylpyridine	1122-62-9	100 mg	Neat	ALR-066N
		100 µg/mL	MeOH	ALR-066S
Alanroot (Inula helenium)	97676-35-2	1000 µg/mL	EtOH	ALR-027S-ET-10X
Alkylphenol ethoxylates:				
Nonylphenol-ethylene oxide condensate (Nonoxynol-9)	26027-38-3	100 mg	Neat	ALR-079N
		100 µg/mL	MeOH	ALR-079S
Polyethylene glycol nonaphenyl ether (Triton N-101)	123359-41-1	100 mg	Neat	ALR-078N
		100 µg/mL	MeOH	ALR-078S
Allylisothiocyanate	57-06-7	100 mg	Neat	ALR-028N
		1000 µg/mL	EtOH	ALR-028S-ET-10X
Amyl cinnamal	122-40-7	100 mg	Neat	ALR-001N
		1000 µg/mL	AcCN	ALR-001S-CN-10X
Amylcinnamyl alcohol	101-85-9	1000 µg/mL	EtOH	ALR-008S-ET-10X
Anisyl alcohol	105-13-5	100 mg	Neat	ALR-014N
		1000 µg/mL	EtOH	ALR-014S-ET-10X
Arsenic	7440-38-2	1000 µg/mL	2-5% HNO ₃	ALR-MET-01S
Balsam of Peru	8007-00-9	100 mg	Neat	ALR-080N
		100 µg/mL	MeOH	ALR-080S
Benzophenone-3 (Bp-3)	131-57-7	100 mg	Neat	ALR-081N
		100 µg/mL	AcCN	ALR-081S-CN
Benzyl alcohol	100-51-6	100 mg	Neat	ALR-002N
		1000 µg/mL	EtOH	ALR-002S-ET-10X
Benzyl benzoate	120-51-4	100 mg	Neat	ALR-019N
		1000 µg/mL	EtOH	ALR-019S-ET-10X
Benzyl butyl phthalate	85-68-7	100 mg	Neat	ALR-082N
		100 µg/mL	MeOH	ALR-082S
Benzyl cinnamate	103-41-3	100 mg	Neat	ALR-015N
		1000 µg/mL	EtOH	ALR-015S-ET-10X
Benzyl cyanide	140-29-4	100 mg	Neat	ALR-029N
		1000 µg/mL	EtOH	ALR-029S-ET-10X
Benzyl paraben	94-18-8	100 mg	Neat	ALR-083N
		100 µg/mL	MeOH	ALR-083S
Benzyl salicylate	118-58-1	100 mg	Neat	ALR-009N
		1000 µg/mL	AcCN	ALR-009S-CN-10X
Bithionol	97-18-7	100 mg	Neat	ALR-084N
		100 µg/mL	MeOH	ALR-084S
5-Bromo-5-nitro-1,3-dioxane (Bronidox L) (BND)	30007-47-7	100 mg	Neat	ALR-074N
		100 µg/mL	MeOH	ALR-074S
2-Bromo-2-nitropropane-1,3-diol (Bronopol)	52-51-7	100 mg	Neat	ALR-067N
		100 µg/mL	MeOH	ALR-067S
2-(4-tert-Butylbenzyl)propionaldehyde (technical grade)	80-54-6	1000 µg/mL	AcCN	ALR-017S-CN-10X
		100 mg	Neat	ALR-087N
Butylated hydroxyanisole (BHA)	25013-16-5	100 µg/mL	MeOH	ALR-087S
		100 mg	Neat	ALR-088N
Butylated hydroxytoluene (BHT & 2,6-DBPC)	128-37-0	100 µg/mL	MeOH	ALR-088S
		100 mg	Neat	ALR-089N
Butylene glycol	107-88-0	100 µg/mL	MeOH	ALR-089S
		100 mg	Neat	ALR-086S
Butyl-methoxydibenzoylmethane (B-MDM) Sunblock, Parsol1789	70356-09-1	100 µg/mL	MeOH	ALR-086S
		100 mg	Neat	ALR-085N
Butyl paraben	94-26-8	100 mg	Neat	ALR-085N
		100 µg/mL	MeOH	ALR-085S



Neats as stated, Solutions in 1 mL

Allergens				
Compound	CAS No.	Conc.	Matrix	Cat. No.
p-tert-Butylphenol	98-54-4	100 mg	Neat	ALR-030N
		1000 µg/mL	EtOH	ALR-030S-ET-10X
Cetone Alpha (technical grade)	127-51-5	1000 µg/mL	AcCN	ALR-024S-CN-10X
Chloroacetamide	79-07-2	100 mg	Neat	ALR-090N
		100 µg/mL	MeOH	ALR-090S
Chloroform	67-66-3	100 mg	Neat	ALR-091N
		100 µg/mL	MeOH	ALR-091S
2-Chloropyridine	109-09-1	100 mg	Neat	ALR-068N
		100 µg/mL	MeOH	ALR-068S
Chromium	7440-47-3	1000 µg/mL	2-5% HNO ₃	ALR-MET-02S
Cinnamal	104-55-2	100 mg	Neat	ALR-010N
		1000 µg/mL	AcCN	ALR-010S-CN-10X
Cinnamyl alcohol	104-54-1	100 mg	Neat	ALR-003N
		1000 µg/mL	EtOH	ALR-003S-ET-10X
Citral	5392-40-5	100 mg	Neat	ALR-004N
		1000 µg/mL	AcCN	ALR-004S-CN-10X
β-Citronellol	106-22-9	100 mg	Neat	ALR-020N
		1000 µg/mL	EtOH	ALR-020S-ET-10X
Coal Tar (black)	8007-45-2	100 mg	Neat	ALR-094N
		100 µg/mL	Toluene	ALR-094S-T
Cobalt	7440-48-4	1000 µg/mL	2-5% HNO ₃	ALR-MET-03S
Coumarin	91-64-5	100 mg	Neat	ALR-011N
		1000 µg/mL	AcCN	ALR-011S-CN-10X
2,4-Diaminoaniline sulfate hydrate	123333-56-2	100 µg/mL	Pyridine	ALR-070S-R1
2,4-Diaminophenol	137-09-7	100 mg	Neat	ALR-063N
		100 µg/mL	MeOH	ALR-063S
Diamyl phthalate	131-18-0	100 mg	Neat	ALR-098N
		100 µg/mL	MeOH	ALR-098S
Diazolidinyl urea	78491-02-8	100 mg	Neat	ALR-106N
		100 µg/mL	MeOH	ALR-106S
Dibromsalon (Halogenated salicylanilides)	87-12-7	100 mg	Neat	ALR-107N
		100 µg/mL	MeOH	ALR-107S
Dicyclohexyl phthalate	84-61-7	100 mg	Neat	ALR-099N
		100 µg/mL	MeOH	ALR-099S
Diethanolamine (DEA)	111-42-2	100 mg	Neat	ALR-109N
		100 µg/mL	MeOH	ALR-109S
Di(2-ethyl hexyl) phthalate (DEHP)	117-81-7	100 mg	Neat	ALR-097N
		100 µg/mL	MeOH	ALR-097S
Diethyl maleate	141-05-9	100 mg	Neat	ALR-033N
		1000 µg/mL	EtOH	ALR-033S-ET-10X
Diethyl phthalate	84-66-2	100 mg	Neat	ALR-110N
		100 µg/mL	MeOH	ALR-110S
Di-hexyl phthalate	84-75-3	100 mg	Neat	ALR-100N
		100 µg/mL	MeOH	ALR-100S
Dihydrocoumarin	119-84-6	100 mg	Neat	ALR-034N
		1000 µg/mL	Acetone	ALR-034S-A-10X
Diisodecyl phthalate	26761-40-0	100 mg	Neat	ALR-101N
		100 µg/mL	MeOH	ALR-101S
Diisononyl phthalate	68515-48-0	100 mg	Neat	ALR-102N
		100 µg/mL	MeOH	ALR-102S
Diisooctyl phthalate	27554-26-3	100 mg	Neat	ALR-103N
		100 µg/mL	MeOH	ALR-103S
Dimethyl citraconate	617-54-9	100 mg	Neat	ALR-038N
		1000 µg/mL	EtOH	ALR-038S-ET-10X
Dimethyl phthalate (DMP)	131-11-3	100 mg	Neat	ALR-111N
		100 µg/mL	MeOH	ALR-111S
6,10-Dimethyl-3,5,9-undecatrien-2-one (Pseudoionone)	141-10-6	100 mg	Neat	ALR-040N
		1000 µg/mL	Acetone	ALR-040S-A-10X
Di-n-butyl phthalate (DBP)	84-74-2	100 mg	Neat	ALR-104N
		100 µg/mL	MeOH	ALR-104S
Di-n-octyl phthalate	117-84-0	100 mg	Neat	ALR-105N
		100 µg/mL	MeOH	ALR-105S
1,4-Dioxane	123-91-1	100 mg	Neat	ALR-062N
		100 µg/mL	MeOH	ALR-062S
Diphenylamine	122-39-4	100 mg	Neat	ALR-041N
		1000 µg/mL	EtOH	ALR-041S-ET-10X
2-Ethoxyethanol	110-80-5	100 mg	Neat	ALR-064N
		100 µg/mL	MeOH	ALR-064S
2-Ethoxyethanol acetate	111-15-9	100 mg	Neat	ALR-065N
		100 µg/mL	MeOH	ALR-065S
Ethyl acrylate	140-88-5	100 mg	Neat	ALR-042N
		1000 µg/mL	EtOH	ALR-042S-ET-10X
Ethyl paraben	120-47-8	100 mg	Neat	ALR-113N
		100 µg/mL	MeOH	ALR-113S
Ethylene diamine dihydrochloride	333-18-6	100 mg	Neat	ALR-114N
		100 µg/mL	MeOH	ALR-114S

Allergens continued on next page



Allergens

Allergens

Compound	CAS No.	Conc.	Matrix	Cat. No.
2-Ethylhexyl salicylate	118-60-5	100 mg	Neat	ALR-174N
		100 µg/mL	AcCN	ALR-114S-CN
Eugenol	97-53-0	100 mg	Neat	ALR-005N
		1000 µg/mL	EtOH	ALR-005S-ET-10X
Farnesol	4602-84-0	100 mg	Neat	ALR-016N
		1000 µg/mL	EtOH	ALR-016S-ET-10X
Formaldehyde	50-00-0	100 µg/mL	Water	ALR-115S-W
Freon #11 Trichlorofluoromethane	75-69-4	200 µg/mL	MeOH	ALR-CFC-013S-2X
Freon #12 Dichlorodifluoromethane	75-71-8	200 µg/mL	MeOH	ALR-CFC-008S-2X
Freon #13 Chlorotrifluoromethane	75-72-9	200 µg/mL	MeOH	ALR-CFC-007S-2X
Freon #13b1 Bromotrifluoromethane	75-63-8	200 µg/mL	MeOH	ALR-CFC-001S-2X
Freon #21 Dichlorofluoromethane	75-43-4	200 µg/mL	MeOH	ALR-CFC-009S-2X
Freon #22 Chlorodifluoromethane	75-45-6	200 µg/mL	MeOH	ALR-CFC-003S-2X
Freon #23 Trifluoromethane	75-46-7	200 µg/mL	MeOH	ALR-CFC-015S-2X
Freon #40 Chloromethane	74-87-3	200 µg/mL	MeOH	ALR-CFC-005S-2X
Freon #113 1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	200 µg/mL	MeOH	ALR-CFC-014S-2X
Freon #114 1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	200 µg/mL	MeOH	ALR-CFC-010S-2X
Freon #115 Chloropentafluoroethane	76-15-3	200 µg/mL	MeOH	ALR-CFC-006S-2X
Freon #134a Tetrafluoroethane	811-97-2	200 µg/mL	MeOH	ALR-CFC-012S-2X
Freon #142b 1-Chloro-1,1-difluoroethane	75-68-3	200 µg/mL	MeOH	ALR-CFC-002S-2X
Freon #152a 1,1-Difluoroethane	75-37-6	200 µg/mL	MeOH	ALR-CFC-011S-2X
Freon #160 Chloroethane	75-00-3	200 µg/mL	MeOH	ALR-CFC-004S-2X
Geraniol	106-24-1	100 mg	Neat	ALR-012N
		1000 µg/mL	EtOH	ALR-012S-ET-10X
trans-2-Heptenal	18829-55-5	100 mg	Neat	ALR-044N
		1000 µg/mL	AcCN	ALR-044S-CN-10X
Heptyl paraben	1085-12-7	100 mg	Neat	ALR-117N
		100 µg/mL	MeOH	ALR-117S
trans-2-Hexenal diethyl acetal	67746-30-9	100 mg	Neat	ALR-045N
		1000 µg/mL	EtOH	ALR-045S-ET-10X
trans-2-Hexenal dimethyl acetal	18318-83-7	100 mg	Neat	ALR-046N
		1000 µg/mL	MeOH	ALR-046S-10X
Hexachlorophene (HCP)	70-30-4	100 mg	Neat	ALR-118N
		100 µg/mL	MeOH	ALR-118S
Hexyl cinnamaldehyde	101-86-0	1000 µg/mL	EtOH	ALR-021S-ET-10X
Homosalate (HMS)	118-56-9	100 µg/mL	AcCN	ALR-119S-CN
Dihydroabietyl alcohol	26266-77-3	100 mg	Neat	ALR-047N
		1000 µg/mL	EtOH	ALR-047S-ET-10X
Hydroquinone monoethyl ether (4-Ethoxyphenol)	622-62-8	100 mg	Neat	ALR-048N
		1000 µg/mL	EtOH	ALR-048S-ET-10X
p-Hydroxyanisole	150-76-5	100 mg	Neat	ALR-145N
		100 µg/mL	MeOH	ALR-145S
4-Hydroxybenzoic acid (Paraben)	99-96-7	100 mg	Neat	ALR-069N
		100 µg/mL	AcCN	ALR-069S-CN
Hydroxy-citronellal	107-75-5	100 mg	Neat	ALR-006N
		1000 µg/mL	AcCN	ALR-006S-CN-10X
tris(Hydroxymethyl)nitromethane (Tris Nitro)	126-11-4	100 mg	Neat	ALR-169N
		100 µg/mL	MeOH	ALR-169S
Hydroxymethylpentylcyclohexenecarboxaldehyde	31906-04-4	100 mg	Neat	ALR-013N
		1000 µg/mL	AcCN	ALR-013S-CN-10X
Imidazolidinyl urea	39236-46-9	100 mg	Neat	ALR-120N
		100 µg/mL	MeOH	ALR-120S
α-Ionone	127-41-3	100 mg	Neat	ALR-171N
		100 µg/mL	MeOH	ALR-171S
β-Ionone	79-77-6	100 mg	Neat	ALR-172N
		100 µg/mL	MeOH	ALR-172S
Isobutyl paraben	4247-02-3	100 mg	Neat	ALR-121N
		100 µg/mL	MeOH	ALR-121S
Isoeugenol	97-54-1	100 mg	Neat	ALR-007N
		1000 µg/mL	EtOH	ALR-007S-ET-10X
Isopropyl paraben	4191-73-5	100 mg	Neat	ALR-122N
		100 µg/mL	MeOH	ALR-122S
Lanolin, anhydrous	8006-54-0	100 mg	Neat	ALR-123N
		100 µg/mL	MeOH	ALR-123S-A
Lead	7439-92-1	1000 µg/mL	2-5% HNO ₃	ALR-MET-04S
d-Limonene	5989-27-5	100 mg	Neat	ALR-022N
		1000 µg/mL	EtOH	ALR-022S-ET-10X
Linalool	78-70-6	100 mg	Neat	ALR-018N
		1000 µg/mL	EtOH	ALR-018S-ET-10X
Mercury	7439-97-6	1000 µg/mL	2-5% HNO ₃	ALR-MET-05S
Metabromsalon	2577-72-2	100 mg	Neat	ALR-128N
		100 µg/mL	MeOH	ALR-128S
7-Methoxycoumarin	531-59-9	100 mg	Neat	ALR-050N
		1000 µg/mL	AcCN	ALR-050S-CN-10X
4-(p-Methoxyphenyl)-3-butene-2-one	943-88-4	1000 µg/mL	AcCN	ALR-051S-CN-10X
4-Methoxy-m-phenylenediamine-sulfate hydrate	6219-67-6	100 mg	Neat	ALR-072N
		100 µg/mL	MeOH	ALR-072S
1-(p-Methoxyphenyl)-1-penten-3-one	104-27-8	100 mg	Neat	ALR-052N
		1000 µg/mL	AcCN	ALR-052S-CN-10X



Neats as stated, Solutions in 1 mL

Allergens				
Compound	CAS No.	Conc.	Matrix	Cat. No.
4-Methyl-benzylidene camphor (4-MBC)	36861-47-9	100 mg	Neat	ALR-073N
		100 µg/mL	MeOH	ALR-073S
6-Methylcoumarin (6-MC)	92-48-8	100 mg	Neat	ALR-075N
		100 µg/mL	MeOH	ALR-075S
7-Methylcoumarin	2445-83-2	100 mg	Neat	ALR-054N
		1000 µg/mL	AcCN	ALR-054S-CN-10X
Methyl heptyne carbonate	111-12-6	100 mg	Neat	ALR-023N
		1000 µg/mL	EtOH	ALR-023S-ET-10X
5-Methyl-2,3-hexanedione (Acetyl isovaleryl)	13706-86-0	100 mg	Neat	ALR-055N
		1000 µg/mL	AcCN	ALR-055S-CN-10X
Methyl methacrylate monomer	80-62-6	100 mg	Neat	ALR-129N
		100 µg/mL	MeOH	ALR-129S
Methyl paraben	99-76-3	100 mg	Neat	ALR-130N
		100 µg/mL	MeOH	ALR-130S
Methyl trans-2-butenate	623-43-8	100 mg	Neat	ALR-053N
		1000 µg/mL	MeOH	ALR-053S-10X
Methyldibromoglutaronitrile	35691-65-7	100 mg	Neat	ALR-132N
		100 µg/mL	MeOH	ALR-132S
Methylene chloride	75-09-2	100 mg	Neat	ALR-133N
		100 µg/mL	MeOH	ALR-133S
Methyleugenol	93-15-2	100 mg	Neat	ALR-061N
		1000 µg/mL	EtOH	ALR-061S-ET-10X
Monobenzyl phthalate (mBzP)	2528-16-7	100 mg	Neat	ALR-134N
		100 µg/mL	AcCN	ALR-134S-CN
Monobutyl phthalate (mBP)	131-70-4	100 mg	Neat	ALR-135N
		100 µg/mL	AcCN	ALR-135S-CN
Monoethanolamine (MEA) (2-Aminoethanol)	141-43-5	100 mg	Neat	ALR-136N
		100 µg/mL	MeOH	ALR-136S
Monoethyl phthalate (mEP)	2306-33-4	100 mg	Neat	ALR-137N
		100 µg/mL	AcCN	ALR-137S-CN
Monoethylhexyl phthalate (mEHP)	4376-20-9	100 mg	Neat	ALR-138N
		100 µg/mL	AcCN	ALR-138S-CN
Monomethyl phthalate	4376-18-5	100 mg	Neat	ALR-139N
		100 µg/mL	AcCN	ALR-139S-CN
Mono-n-pentyl phthalate NEW	24539-56-8	100 µg/mL	AcCN	ALR-177S-CN
Potassium dichromate	7778-50-9	1000 µg/mL	Water	ALR-MET-07S
Nickel	7440-02-0	1000 µg/mL	2-5% HNO ₃	ALR-MET-06S
N-Phenyl-p-phenylenediamine	101-54-2	100 mg	Neat	ALR-140N
		100 µg/mL	MeOH	ALR-140S
Oak Moss extract	90028-68-5	100 mg	Neat	ALR-026N
		1000 µg/mL	EtOH	ALR-026S-ET-10X
Octyl-dimethyl-PABA (OD-PABA)(Padimate O)	21245-02-3	100 mg	Neat	ALR-146N
		100 µg/mL	MeOH	ALR-146S
Octyl-methoxycinnamate (OMC)	5466-77-3	100 mg	Neat	ALR-144N
		100 µg/mL	MeOH	ALR-144S
4-Phenyl-3-buten-2-one	122-57-6	100 mg	Neat	ALR-058N
		1000 µg/mL	AcCN	ALR-058S-CN-10X
meta-Phenylenediamine (MPD)	108-45-2	100 mg	Neat	ALR-127N
		100 µg/mL	MeOH	ALR-127S
para-Phenylenediamine (PPD)	106-50-3	100 mg	Neat	ALR-147N
		100 µg/mL	MeOH	ALR-147S
Polyethylene glycol (PEG), appr. Molecular weight 200	25322-68-3	100 mg	Neat	ALR-149N-MW200
		100 µg/mL	MeOH	ALR-149S-MW200
Polyethylene glycol (PEG), appr. Molecular weight 400	25322-68-3	100 mg	Neat	ALR-149N-MW400
		100 µg/mL	MeOH	ALR-149S-MW400
Polyethylene glycol (PEG), appr. Molecular weight 600	25322-68-3	100 mg	Neat	ALR-149N-MW600
		100 µg/mL	MeOH	ALR-149S-MW600
Polyethylene glycol (PEG), appr. Molecular weight 1500	25322-68-3	100 mg	Neat	ALR-149N-MW1500
		100 µg/mL	MeOH	ALR-149S-MW1500
Polyethylene glycol (PEG), appr. Molecular weight 4000	25322-68-3	100 mg	Neat	ALR-149N-MW4000
		100 µg/mL	MeOH	ALR-149S-MW4000
Polyvinylpyrrolidone PVP/PA Copolymer	9003-39-8	100 µg/mL	MeOH	ALR-150S
Potassium dichromate	7778-50-9	1000 µg/mL	Water	ALR-MET-07S
Potassium sorbate	24634-61-5	100 mg	Neat	ALR-152N
		100 µg/mL	MeOH	ALR-152S
Propyl paraben	94-13-3	100 mg	Neat	ALR-153N
		100 µg/mL	MeOH	ALR-153S
Propylene glycol (PG)	57-55-6	100 µg/mL	MeOH	ALR-154S
Protocatechuic acid	99-50-3	100 mg	Neat	ALR-155N
		100 µg/mL	AcCN	ALR-155S-CN
Pyrocatechol	120-80-9	100 mg	Neat	ALR-156N
		100 µg/mL	MeOH	ALR-156S
Quaternium-15	51229-78-8	100 mg	Neat	ALR-157N
		100 µg/mL	MeOH	ALR-157S
Resorcinol	108-46-3	100 mg	Neat	ALR-158N
		100 µg/mL	MeOH	ALR-158S

Allergens continued on next page



Allergens & EU Directive List

Neats as stated, Solutions in 1 mL

Allergens

Compound	CAS No.	Conc.	Matrix	Cat. No.
Salicylic acid	69-72-7	100 mg	Neat	ALR-173N
Sodium hydroxide	1310-73-2	100 µg/mL	Water	ALR-173S-W
		100 mg	Neat	ALR-159N
		100 µg/mL	MeOH	ALR-159S
Sodium nitrite	7632-00-0	100 mg	Neat	ALR-160N
		100 µg/mL	Water	ALR-160S-W
Talc	14807-96-6	100 mg	Neat	ALR-161N
Tetrachlorosalicylanilide	1154-59-2	100 mg	Neat	ALR-162N
		100 µg/mL	MeOH	ALR-162S
		100 mg	Neat	ALR-163N
Thimerosal	54-64-8	100 µg/mL	MeOH	ALR-163S
		100 mg	Neat	ALR-164N
		100 µg/mL	MeOH	ALR-164S
Tree Moss extract	90028-67-4	1000 µg/mL	EtOH	ALR-025S-ET-10X
Tribomosalan	87-10-5	100 mg	Neat	ALR-167N
		100 µg/mL	MeOH	ALR-167S
		100 mg	Neat	ALR-168N
Triethanolamine (TEA)	102-71-6	100 µg/mL	MeOH	ALR-168S
		100 mg	Neat	ALR-060N
Verbena oil (Lippia citriodora Kunth)	8024-12-2	1000 µg/mL	EtOH	ALR-060S-ET-10X
		100 µg/mL	MeOH	ALR-170S
Vinyl chloride	75-01-4	100 µg/mL	MeOH	ALR-170S
Zirconium	7440-67-7	1000 µg/mL	2-5% HNO ₃	ALR-MET-08S

EU Directive 76/768/EEC

EU Directive List of 26 Regulated Contact Allergens:

Set of all 26 EU Allergens (in Solution)

ALR-EU26-R1-SET

Each at 1000 µg/mL Conc. (1 mL)

26 x 1 mL

Compound	CAS No.	Cat. No.	1 mL
Amyl cinnamal	122-40-7	ALR-001S-CN-10X	
Amylcinnamyl alcohol	101-85-9	ALR-008S-ET-10X	
Anisyl alcohol	105-13-5	ALR-014S-ET-10X	
Benzyl alcohol	100-51-6	ALR-002S-ET-10X	
Benzyl benzoate	120-51-4	ALR-019S-ET-10X	
Benzyl cinnamate	103-41-3	ALR-015S-ET-10X	
Benzyl salicylate	118-58-1	ALR-009S-CN-10X	
2-(4-tert-Butylbenzyl)propionaldehyde (technical grade)	80-54-6	ALR-017S-CN-10X	
Cetone Alpha (technical grade)	127-51-5	ALR-024S-CN-10X	
Cinnamal	104-55-2	ALR-010S-CN-10X	
Cinnamyl alcohol	104-54-1	ALR-003S-ET-10X	
Citral	5392-40-5	ALR-004S-CN-10X	
b-Citronellol	106-22-9	ALR-020S-ET-10X	
Coumarin	91-64-5	ALR-011S-CN-10X	
Eugenol	97-53-0	ALR-005S-ET-10X	
Farnesol	4602-84-0	ALR-016S-ET-10X	
Geraniol	106-24-1	ALR-012S-ET-10X	
Hexyl cinnamaldehyde	101-86-0	ALR-021S-ET-10X	
Hydroxy-citronellal	107-75-5	ALR-006S-CN-10X	
Hydroxymethylpentylcyclohexene carboxaldehyde	31906-04-4	ALR-013S-CN-10X	
Isoeugenol	97-54-1	ALR-007S-ET-10X	
d-Limonene	5989-27-5	ALR-022S-ET-10X	
Linalool	78-70-6	ALR-018S-ET-10X	
Methyl heptyne carbonate	111-12-6	ALR-023S-ET-10X	
Oak Moss extract	90028-68-5	ALR-026S-ET-10X	
Tree Moss extract	90028-67-4	ALR-025S-ET-10X	

EU Directive List of substances that may be banned:

Set of 25 Allergens (in Solution)

ALR-EU36-R1-SET

Neats at 100 mg, Solutions are in 1000 µg/mL Conc. (1 mL)

25 x 1 mL

Compound	CAS No.	Cat. No.	1 mL
Alanroot (Inula helenium)	97676-35-2	ALR-027S-ET-10X	
Allylthiocyanate	57-06-7	ALR-028S-ET-10X	
Benzyl cyanide	140-29-4	ALR-029S-ET-10X	
p-tert-Butylphenol	98-54-4	ALR-030S-ET-10X	
Diethyl maleate	141-05-9	ALR-033S-ET-10X	
Dihydrocoumarin	119-84-6	ALR-034S-A-10X	
Dimethyl citraconate	617-54-9	ALR-038S-ET-10X	
6,10-Dimethyl-3,5,9-undecatrien-2-one (Pseudoionone)	141-10-6	ALR-040S-A-10X	
Diphenylamine	122-39-4	ALR-041S-ET-10X	
Ethyl acrylate	140-88-5	ALR-042S-ET-10X	
trans-2-Heptenal	18829-55-5	ALR-044S-CN-10X	
trans-2-Hexenal diethyl acetal	67746-30-9	ALR-045S-ET-10X	
trans-2-Hexenal dimethyl acetal	18318-83-7	ALR-046S-10X	
Dihydroabietyl alcohol	26266-77-3	ALR-047S-ET-10X	
Hydroquinone monoethyl ether (4-Ethoxyphenol)	622-62-8	ALR-048S-ET-10X	
7-Methoxycoumarin	531-59-9	ALR-050S-CN-10X	
4-(p-Methoxyphenyl)-3-butene-2-one	943-88-4	ALR-051S-CN-10X	
1-(p-Methoxyphenyl)-1-penten-3-one	104-27-8	ALR-052S-CN-10X	
7-Methylcoumarin	2445-83-2	ALR-054S-CN-10X	
5-Methyl-2,3-hexanedione (Acetyl isovaleryl)	13706-86-0	ALR-055S-CN-10X	
Methyl trans-2-butenate	623-43-8	ALR-053S-10X	
Methyleugenol	93-15-2	ALR-061S-ET-10X	
Musk ambrette (solution only)	83-66-9	ALR-056S-CN-10X	
4-Phenyl-3-buten-2-one	122-57-6	ALR-058S-CN-10X	
Verbena oil (Lippia citriodora Kunth)	8024-12-2	ALR-060S-ET-10X	

Technical Mixtures

When a compound has a purity identified as "Technical" or "Tech Mixture" it means that the standard is not comprised of just one main compound. These are mixtures of multiple chemicals that make up a particular product and every chemical in the mix are components that define the product. The analysis considers all compounds in the product. Aroclors, flame retardants, PBDE technical grade, halowaxes, and some allergens, plastic additives, and dyes are classified as "Technical Mixtures".

Key to Catalog Numbers

N	Neat, 100 mg
S	Solution in Methanol
S-A	Solution in Acetone
S-CN	Solution in Acetonitrile
S-ET	Solution in Ethanol
S-T	Solution in Toluene
S-W	Solution in Water



Sun Block

Set of 6 Sun Block Solutions **ALR-SUN-SET** **6 x 1 mL**
Each at 100 µg/mL Conc. (1 mL)

Compound	CAS No.	Cat. No.	1 mL
Benzophenone-3 (Bp-3)	131-57-7	ALR-081S-CN	
Butyl-methoxydibenzoylmethane(B-MDM)	70356-09-1	ALR-086S	
Sunblock, Parsol 1789			
Homosalate (HMS)	118-56-9	ALR-119S-CN	
4-Methyl-benzylidene camphor (4-MBC)	36861-47-9	ALR-073S	
Octyl-dimethyl-PABA (OD-PABA) (Padimate O)	21245-02-3	ALR-146S	
Octyl-methoxycinnamate (OMC)	5466-77-3	ALR-144S	

Parabens

Set of 11 Paraben Solutions **ALR-PAR-SET** **11 x 1 mL**
Each at 100 µg/mL Conc. (1 mL)

Compound	CAS No.	Cat. No.	1 mL
Benzyl paraben	94-18-8	ALR-083S	
Butyl paraben	94-26-8	ALR-085S	
Ethyl paraben	120-47-8	ALR-113S	
Heptyl paraben	1085-12-7	ALR-117S	
4-Hydroxybenzoic acid (Paraben)	99-96-7	ALR-069S-CN	
Isobutyl paraben	4247-02-3	ALR-121S	
Isopropyl paraben	4191-73-5	ALR-122S	
Methyl paraben	99-76-3	ALR-130S	
Potassium sorbate	24634-61-5	ALR-152S	
Propyl paraben	94-13-3	ALR-153S	
Protocatechuic acid	99-50-3	ALR-155S-CN	

Phthalates

Set of 17 Phthalate Solutions **ALR-PHT-SET** **17 x 1 mL**
Each at 100 µg/mL Conc. (1 mL)

Compound	CAS No.	Cat. No.	1 mL
Benzyl butyl phthalate	85-68-7	ALR-082S	
Diamyl phthalate	131-18-0	ALR-098S	
Dicyclohexyl phthalate	84-61-7	ALR-099S	
Di(2-ethyl hexyl) phthalate (DEHP)	117-81-7	ALR-097S	
Diethyl phthalate	84-66-2	ALR-110S	
Di-hexyl phthalate	84-75-3	ALR-100S	
Diisodecyl phthalate	26761-40-0	ALR-101S	
Diisononyl phthalate	68515-48-0	ALR-102S	
Diisooctyl phthalate	27554-26-3	ALR-103S	
Dimethyl phthalate (DMP)	131-11-3	ALR-111S	
Di-n-butyl phthalate (DBP)	84-74-2	ALR-104S	
Di-n-octyl phthalate	117-84-0	ALR-105S	
Monobenzyl phthalate (mBzP)	2528-16-7	ALR-134S-CN	
Monobutyl phthalate (mBP)	131-70-4	ALR-135S-CN	
Monoethyl phthalate (mEP)	2306-33-4	ALR-137S-CN	
Monoethylhexyl phthalate (mEHP)	4376-20-9	ALR-138S-CN	
Monomethyl phthalate	4376-18-5	ALR-139S-CN	

Chlorofluorocarbon Propellants (CFCs)

Set of 15 ALR-CFCs Solutions **ALR-CFC-SET** **15 x 1 mL**
Each at 200 µg/mL Conc. (1 mL)

Freon	Compound	CAS No.	Cat. No.	1 mL
Freon #11	Trichlorofluoromethane	75-69-4	ALR-CFC-013S-2X	
Freon #12	Dichlorodifluoromethane	75-71-8	ALR-CFC-008S-2X	
Freon #13	Chlorotrifluoromethane	75-72-9	ALR-CFC-007S-2X	
Freon #13b1	Bromotrifluoromethane	75-63-8	ALR-CFC-001S-2X	
Freon #21	Dichlorofluoromethane	75-43-4	ALR-CFC-009S-2X	
Freon #22	Chlorodifluoromethane	75-45-6	ALR-CFC-003S-2X	
Freon #23	Trifluoromethane	75-46-7	ALR-CFC-015S-2X	
Freon #40	Chloromethane	74-87-3	ALR-CFC-005S-2X	
Freon #113	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	ALR-CFC-014S-2X	
Freon #114	1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	ALR-CFC-010S-2X	
Freon #115	Chloropentafluoroethane	76-15-3	ALR-CFC-006S-2X	
Freon #134a	Tetrafluoroethane	811-97-2	ALR-CFC-012S-2X	
Freon #142b	1-Chloro-1,1-difluoroethane	75-68-3	ALR-CFC-002S-2X	
Freon #152a	1,1-Difluoroethane	75-37-6	ALR-CFC-011S-2X	
Freon #160	Chloroethane	75-00-3	ALR-CFC-004S-2X	

Metals

Set of 8 Metals Solutions **ALR-MET-SET** **8 x 100 mL**
Each at 1000 µg/mL 2-5% HNO₃ except † in Water (100 mL Volume)

Compound	CAS No.	Cat. No.	100 mL
Arsenic	7440-38-2	ALR-MET-01S	
Chromium	7440-47-3	ALR-MET-02S	
Cobalt	7440-48-4	ALR-MET-03S	
Lead	7439-92-1	ALR-MET-04S	
Mercury	7439-97-6	ALR-MET-05S	
Nickel	7440-02-0	ALR-MET-06S	
Potassium dichromate	7778-50-9	ALR-MET-07S †	
Zirconium	7440-67-7	ALR-MET-08S	

† in Water

Key to Catalog Numbers

N	Neat, 100 mg
S	Solution in Methanol
S-A	Solution in Acetone
S-CN	Solution in Acetonitrile
S-ET	Solution in Ethanol
S-T	Solution in Toluene
S-W	Solution in Water

Purchasing Neat Standards

There are two ways to purchase neat standards: Nominal weight and exact weight. With exact weight, the standards will come with the exact weight contained in the vial indicated on the label. The Cat. No. will have an X-WT to indicate that this is an exact weight. Rinse the sample out of the vial and cap with solvent and dilute to achieve the desired concentration. Unless specified, neat samples are provided with nominal weights. Typically, the vials contain up to 10 to 20% more product, however it is not known when you receive your standard what the exact amount is in the vial. Below is a standard procedure for removing all the neat material from the vial and determining the exact weight of the material in the vial.

Small amounts (5-10 mg) of powder often are spread over the surface of the vial and cap. If the chemical is a liquid it may coat the walls as a thin layer invisible to the eye.

To recover all of the contents contained in a vial of neat material please use the procedure described below:

1. Wipe the outside of the vial (containing the Standard) clean and dry (including the cap).
2. Weigh the entire unit on an analytical balance. Record the weight to the nearest 0.1 mg.
3. Carefully transfer the contents to a volumetric flask using a suitable solvent. Rinse the cap and vial several times to assure a complete transfer.
4. Dry inside and outside of the vial and cap with mild heat or inert gas.
5. Weigh the empty dry vial on the same analytical balance to the nearest 0.1 mg and calculate by difference the amount of material transferred.

AllergenCheck™



Dyes

Azodyes may pose cancer risks and have been restricted in many countries, most notably of the European Union.

Neats at 100 mg. Solutions at 100 µg/mL in MeOH, except as noted.

Individual Dyes

Compound	Synonym	CAS No.	Neat Cat. No.	100 mg	Solution Cat. No.	1 mL
2-Amino-3-nitrophenol		603-85-0	DYE-107N		DYE-107S	
2-Amino-4-chlorophenol		95-85-2	-----		DYE-034S *	
2-Amino-5-(diethylamino)toluene monohydrochloride New		2051-79-8	DYE-104N		DYE-104S	
2-Aminophenol		95-55-6	DYE-108N		DYE-108S	
Acid Red 26	<i>Ponceau Xylidine</i>	3761-53-3	-----		DYE-031S	
Acid Violet 7		4321-69-1	DYE-121N		DYE-121S	
Acid Violet 9		6552-76-2	DYE-122N		DYE-122S	
Acid Violet 19		3244-88-0	DYE-123N		DYE-123S	
Acid Violet 20			DYE-124N		DYE-124S	
Acid Violet 30			DYE-125N-5MG		DYE-125S	
Acid Violet 49		1694-09-3	DYE-120N		DYE-120S	
<i>Basic Blue 26</i>	see Victoria Blue					
Basic Blue 7		2390-60-5	DYE-113N		DYE-113S	
Basic Fuchsin		569-61-9	DYE-049N		DYE-049S	
Basic Red 2		477-73-6	DYE-114N		DYE-114S	
Basic Red 9		569-61-9	-----		DYE-030S	
Basic Violet 1		8004-87-3	DYE-027N		DYE-027S	
Basic Violet 3	Crystal Violet	548-62-9	DYE-028N		DYE-028S	
Basic Violet 14		632-99-5	-----		DYE-012S	
<i>Congo Red</i>	see Direct Red 28					
Crocein Scarlet 3b		5413-75-2	DYE-115N		DYE-115S	
<i>Crystal Violet</i>	see Basic Violet 3					
D & C Red 7		5281-04-9	DYE-060N		DYE-060S	
2,4-Diaminodiphenylamine		136-17-4	DYE-102N		-----	
2,6-Diaminopyridine		141-86-6	DYE-103N		DYE-103S	
N,N-Dimethyl-1,4-phenylenediamine		99-89-9	DYE-106N		DYE-106S	
Direct Black 38		1937-37-7	-----		DYE-013S	
Direct Blue 6		2602-46-2	-----		DYE-014S	
Direct Red 28	<i>Congo Red</i>	573-58-0			DYE-064S	
Disperse Blue 1		2475-45-8	-----		DYE-001S	
Disperse Blue 3		2475-46-9	-----		DYE-004S	
Disperse Blue 7		3179-90-6	-----		DYE-015S	
Disperse Blue 26		3860-63-7	-----		DYE-016S	
Disperse Blue 35		12222-75-2	-----		DYE-009S	
Disperse Blue 102		12222-97-8	-----		DYE-017S	
Disperse Blue 124		61951-51-7	-----		DYE-010S	
Disperse Brown 1		23355-64-8	DYE-051N		DYE-051S	
Disperse Orange 1		2581-69-3	-----		DYE-005S	
Disperse Orange 3		730-40-5	-----		DYE-006S	
Disperse Orange 11		82-28-0	-----		DYE-002S	
Disperse Orange 37		13301-61-6	-----		DYE-011S	
Disperse Red 1		2872-52-8	-----		DYE-007S	
Disperse Red 11		2872-48-2	-----		DYE-018S	
Disperse Red 17		3179-89-3	-----		DYE-019S	
Disperse Yellow 1		119-15-3	-----		DYE-053S	
Disperse Yellow 3		2832-40-8	DYE-003N		DYE-003S	
Disperse Yellow 9		6373-73-5	-----		DYE-008S	
Eosin Y NEW		15086-94-9	DYE-127N		DYE-127S	
Eriochrome Black A		3618-58-4	DYE-109N		DYE-109S	
FD & C Blue 1		3844-45-9	DYE-062N		DYE-062S	
FD & C Blue 2		860-22-0	DYE-063N		DYE-063S	
FD & C Red 3		16423-68-0	DYE-057N		DYE-057S	
FD & C Red 40		25956-17-6	DYE-056N		-----	
FD & C Yellow 5		1934-21-0	DYE-058N		DYE-058S	
FD & C Yellow 6		2783-94-0	DYE-059N		DYE-059S	

* in AcCN



Neats at 100 mg. Solutions at 100 µg/mL in MeOH, except as noted.

Individual Dyes

Compound	Synonym	CAS No.	Neat Cat. No.	100 mg	Solution Cat. No.	1 mL
Food Yellow 3	<i>Sunset Yellow FCF</i>	2783-94-0	DYE-024N		DYE-024S	
Metanil Yellow		587-98-4	DYE-117N		DYE-117S	
Methyl Blue NEW		28983-56-4	DYE-128N		DYE-128S	
2,3-Naphthalenediol		92-44-4	-----		DYE-033S *	
2-Nitro-1,4-phenylenediamine		5307-14-2	DYE-110N		DYE-110S	
Orange II sodium salt NEW		633-96-5	DYE-116N		DYE-116S	
Para Red		6410-10-2	DYE-026N		DYE-026S	
4-Phenylazoaniline hydrochloride		3457-98-5	DYE-046N		DYE-046S	
Ponceau SX		4548-53-2	-----		DYE-112S	
<i>Ponceau Xylidine</i>	see Acid Red 26					
Rhodamine B		81-88-9	-----		DYE-118S	
Solvent Orange 7	Sudan II	3118-97-6	DYE-021N		DYE-021S	
<i>Solvent Orange R</i>	see Solvent Yellow 14					
Solvent Red 19	<i>Sudan Red 7B</i>	6368-72-5	DYE-025N		DYE-025S	
Solvent Red 23	<i>Sudan III</i>	85-86-9	DYE-022N		DYE-022S	
Solvent Red 24	<i>Sudan IV</i>	85-83-6	DYE-023N		DYE-023S	
Solvent Yellow 1		3457-98-5	-----		DYE-029S	
Solvent Yellow 14	<i>Sudan I, Solvent Orange R</i>	842-07-9	DYE-020N		DYE-020S	
<i>Sudan I</i>	see Solvent Yellow 14					
Sudan II	Solvent Orange 7	3115-97-6	DYE-045N		DYE-045S	
<i>Sudan III</i>	see Solvent Red 23					
Sudan IV	see Solvent Red 24					
<i>Sudan Red 7B</i>	see Solvent Red 19					
Sunfast D & C Red 34		569-61-9	DYE-061N		DYE-061S	
<i>Sunset Yellow FCF</i>	see Food Yellow 3					
Timbasol Brown trans oxide		569-61-9	DYE-055N		DYE-055S	
Victoria Blue	<i>Basic Blue 26</i>	2580-56-5	DYE-111N		DYE-111S	

* in AcCN

EU Directive Dyes on next page





Dyes

EU Directive 2002/61/EC Determination of Aryl Amine Breakdown Products in Azo Dyes

Individual Aryl Amine Standards

Compound	100 µg/mL in AcCN 1 mL	1000 µg/mL in AcCN 1 mL	10 µg/mL in Ethyl acetate for 10 mL 10 mL
o-Aminoazotoluene (01)	RAC-01	RAC-01-10X	RAC-01-EA-0.1X-10ML
4-Aminobiphenyl (02)	RAC-02	RAC-02-10X	RAC-02-EA-0.1X-10ML
2-Amino-4-nitrotoluene (03)	RAC-03	RAC-03-10X	RAC-03-EA-0.1X-10ML
Benzidine (04)	RAC-04	RAC-04-10X	RAC-04-EA-0.1X-10ML
4-Chloroaniline (05)	RAC-05	RAC-05-10X	RAC-05-EA-0.1X-10ML
4-Chloro-o-toluidine (06)	RAC-06	RAC-06-10X	RAC-06-EA-0.1X-10ML
p-Cresidine (07)	RAC-07	RAC-07-10X	RAC-07-EA-0.1X-10ML
2,4-Diaminoaniline * (08)	RAC-08	RAC-08-10X	RAC-08-EA-0.1X-10ML
4,4'-Diaminodiphenylmethane (09)	RAC-09	RAC-09-10X	RAC-09-EA-0.1X-10ML
2,4-Diaminotoluene (10)	RAC-10	RAC-10-10X	RAC-10-EA-0.1X-10ML
3,3'-Dichlorobenzidine (11)	RAC-11	RAC-11-10X	RAC-11-EA-0.1X-10ML
3,3'-Dimethoxybenzidine (12)	RAC-12	RAC-12-10X	RAC-12-EA-0.1X-10ML
3,3'-Dimethylbenzidine (13)	RAC-13	RAC-13-10X	RAC-13-EA-0.1X-10ML
3,3'-Dimethyl-4,4'-diaminodiphenylmethane (14)	RAC-14	RAC-14-10X	RAC-14-EA-0.1X-10ML
4,4'-Methylenebis(2-chloroaniline) (15)	RAC-15	RAC-15-10X	RAC-15-EA-0.1X-10ML
2-Naphthylamine (16)	RAC-16	RAC-16-10X	RAC-16-EA-0.1X-10ML
4,4'-Oxydianiline (17)	RAC-17	RAC-17-10X	RAC-17-EA-0.1X-10ML
4,4'-Thiodianiline (18)	RAC-18	RAC-18-10X	RAC-18-EA-0.1X-10ML
o-Toluidine (19)	RAC-19	RAC-19-10X	RAC-19-EA-0.1X-10ML
2,4,5-Trimethylaniline (20)	RAC-20	RAC-20-10X	RAC-20-EA-0.1X-10ML
p-Aminoazobenzene (21)	RAC-21	RAC-21-10X	RAC-21-EA-0.1X-10ML
2-Aminobiphenyl (22)	RAC-22	RAC-22-10X	RAC-22-EA-0.1X-10ML
o-Anisidine (23)	RAC-23	RAC-23-10X	RAC-23-EA-0.1X-10ML
3-Chloro-o-toluidine (24)	RAC-24	RAC-24-10X	RAC-24-EA-0.1X-10ML

RAC-R1-SET

100 µg/mL

24 x 1 mL (Set includes the above ampules) In Acetonitrile

* In the form of the Sulfate hydrate 171 µg/mL in Pyridine (100 µg/mL as the base)

RAC-R1-10X-SET

1000 µg/mL in AcCN

24 x 1 mL (Set includes the above ampules) In Acetonitrile

* In the form of the Sulfate hydrate 1,710 µg/mL in Pyridine (1000 µg/mL as the base)

Carcinogenic Aryl Amine Mix

AE-00049-R1

1 x 1 mL

10 µg/mL in Ethyl acetate

23 comps.

AE-00049-SET

2 x 1 mL

Contains AE-00049-R1 (23 comps. Mix) plus

RAC-08 (2,4-Diaminoaniline) listed on the left

AE-00049-R1-10ML

1 x 10 mL

10 µg/mL in Ethyl acetate

23 comps.

o-Aminoazotoluene (01)
4-Aminobiphenyl (02)
2-Amino-4-nitrotoluene (03)
Benzidine (04)
4-Chloroaniline (05)
4-Chloro-o-toluidine (06)
p-Cresidine (07)
4,4'-Diaminodiphenylmethane (09)
2,4-Diaminotoluene (10)
3,3'-Dichlorobenzidine (11)
3,3'-Dimethoxybenzidine (12)
3,3'-Dimethylbenzidine (13)
3,3'-Dimethyl-4,4'-diaminodiphenylmethane (14)
4,4'-Methylenebis(2-chloroaniline) (15)
2-Naphthylamine (16)
4,4'-Oxydianiline (17)
4,4'-Thiodianiline (18)
o-Toluidine (19)
2,4,5-Trimethylaniline (20)
p-Aminoazobenzene (21)
2-Aminobiphenyl (22)
o-Anisidine (23)
3-Chloro-o-toluidine (24)

Internal Standards

RAC-IS

1 x 1 mL

1000 µg/mL in AcCN

RAC-IS-EA

1 x 1 mL

1000 µg/mL in Ethyl acetate

3,3',5,5'-Tetramethylbenzidine

EU Directive 67/548/EEC Dyes

Criterion #22 Regulated Dyes Carcinogenic

Compound	100 µg/ml in MeOH Cat. No. 1 mL
Disperse Blue 1	DYE-001S
Disperse Orange 11	DYE-002S
Disperse Yellow 3	DYE-003S
Basic Violet 14	DYE-012S
Direct Black 38	DYE-013S
Direct Blue 6	DYE-014S

Criterion #23 Regulated Dye Disperse dyes, Sensitizing

Compound	100 µg/ml in MeOH Cat. No. 1 mL
Disperse Blue 3	DYE-004S
Disperse Orange 1	DYE-005S
Disperse Orange 3	DYE-006S
Disperse Red 1	DYE-007S
Disperse Yellow 9	DYE-008S
Disperse Blue 35	DYE-009S
Disperse Blue 124	DYE-010S
Disperse Orange 37	DYE-011S
Disperse Blue 7	DYE-015S
Disperse Blue 26	DYE-016S
Disperse Blue 102	DYE-017S
Disperse Red 11	DYE-018S
Disperse Red 17	DYE-019S

EU Directive 76/768/EEC Substances contained in Hair Dyes Ban

Compound	CAS No.	Neat Cat. No.	100 mg 100 µg/ml in MeOH Cat. No. 1 mL
2-Amino-3-nitrophenol	603-85-0	DYE-107N	DYE-107S
2-Amino-5-(diethylamino)toluene monohydrochloride	2051-79-8	DYE-104N	DYE-104S
2-Aminophenol	95-55-6	DYE-108N	DYE-108S
Basic Blue 7	2390-60-5	DYE-113N	DYE-113S
Basic Red 2	477-73-6	DYE-114N	DYE-114S
Crocein Scarlet 3b	5413-75-2	DYE-115N	DYE-115S
2,4-Diaminodiphenylamine	136-17-4	DYE-102N	-----
2,6-Diaminopyridine	141-86-6	DYE-103N	DYE-103S
N,N-Diethyl-1,4-phenylenediamine Sulfate	6283-63-2	DYE-105N	DYE-105S
N,N-Dimethyl-1,4-phenylenediamine	99-89-9	DYE-106N	DYE-106S
Eriochrome Black A	3618-58-4	DYE-109N	DYE-109S
2-Nitro-1,4-phenylenediamine	5307-14-2	DYE-110N	DYE-110S
Ponceau SX	4548-53-2	-----	DYE-112S
Victoria Blue	2580-56-5	DYE-111N	DYE-111S

PFOA, Odor and Irritant Standards

Perfluorooctanoic Acid (PFOA)

The acronym PFOA is used to refer to not only the Perfluorooctanoic Acid, but also its principal salts. PFOS is used to refer to Perfluorooctane sulfonate. They are synthetic chemicals that do not occur naturally in the environment and are typically used to aid in the manufacturing of fluoropolymers. These polymers have valuable properties of fire resistance and oil, stain and grease repellence. Another common use is as fire fighting foams. Fluorotelomers will thermally and biologically decompose to form the PFOAs.

The EPA has indicated the potential need for concern and the necessity for additional analytical testing and monitoring. PFOAs have been determined to bioaccumulate and are highly persistent. Continued testing has shown that this class of compounds is widely distributed in the environment.

Compound	CAS No.	Conc.	Matrix	Cat. No.	1 mL
Perfluorooctanoic acid	335-67-1	100 µg/mL	MeOH	PFOA-001S	
Perfluorooctane sulfonic acid	1763-23-1	100 µg/mL	MeOH	PFOS-001S	
Potassium perfluorooctanesulfonate	2795-39-3	100 mg	NEAT	PFOS-002N	
		100 µg/mL	MeOH	PFOS-002S	
Scotchgard™ Pre-2002 Formulation (Tech mix)		100 µg/mL	MeOH	PFOS-SCG-001S	
Scotchgard™ Post-2002 Formulation (Tech mix)		100 µg/mL	MeOH	PFOS-SCG-002S	

Registered Trademarks
Scotchgard 3M



Odor Standards

The determination of odor in drinking water, waste water, and solids also include Japanese quantitative standards to meet the standard methods odor testing parameters. Odor Chemical Reference Materials, include both quantitative and qualitative standards.

Individual Odor Standards

Solutions are in 1 mL, except * in 10 mL

Compound	CAS No.	Conc.	Matrix	Cat. No.
Cumene	98-82-8	10 mg	NEAT	ODOR-06N
(+/-) Geosmin	16423-19-1	2 µg/mL	MeOH	ODOR-01S
Indan	496-11-7	10 mg	NEAT	ODOR-12N
Indene	95-13-6	10 mg	NEAT	ODOR-11N
2-Isobutyl-3-methoxypyrazine *	24683-00-9	1000 µg/mL	MeOH	ODOR-17S-10ML
2-Isopropyl-3-methoxypyrazine *	25773-40-4	1000 µg/mL	MeOH	ODOR-16S-10ML
cis-3-Hexenyl acetate	3681-71-8	10 mg	NEAT	ODOR-08N
cis-3-Hexen-1-ol	928-96-1	10 mg	NEAT	ODOR-09N
2-Methylbenzofuran	4265-25-2	10 mg	NEAT	ODOR-14N
2-Methylisoborneol	2371-42-8	2 µg/mL	MeOH	ODOR-02S
Methyl isobutyl ketone	108-10-1	10 mg	NEAT	ODOR-10N
Naphthalene	91-20-3	10 mg	NEAT	ODOR-13N
trans-2, cis-6-Nonadienal	557-48-2	10 mg	NEAT	ODOR-03N
Styrene	100-42-5	10 mg	NEAT	ODOR-04N
Toluene	108-88-3	10 mg	NEAT	ODOR-05N
2,4,6-Trichloroanisole *	87-40-1	1000 µg/mL	MeOH	ODOR-15S-10ML
m-Xylene	108-38-3	10 mg	NEAT	ODOR-07N



Odor Set

ODOR-STM-SET 12 x 10 mg

trans-2, cis-6-Nonadienal
Styrene
Toluene
Cumene
m-Xylene
cis-3-Hexenyl acetate
cis-3-Hexen-1-ol
Methyl isobutyl ketone
Indene
Indan
Naphthalene
2-Methylbenzofuran

Japan Drinking Water Odor Standard

ODOR-JDWOS 1 x 1 mL
100 µg/mL each in MeOH 2 comps.

(+/-) Geosmin
2-methylisoborneol

Irritant Standards

Irritants are chemicals that can cause a reversible inflammation of nasal passages, tear ducts, or skin. Chemicals that are classified as irritants would usually be classified as corrosives in a more concentrated form such as tear gas and mace.

Compound	CAS No.	Conc.	Matrix	Cat. No.
2-Chloroacetophenone	532-27-4	100 µg/mL	Hexane	IRT-001S
2'-Chloroacetophenone	2142-68-9	100 µg/mL	Hexane	IRT-002S
3'-Chloroacetophenone	99-02-5	100 µg/mL	Hexane	IRT-003S
4'-Chloroacetophenone	99-91-2	100 µg/mL	Hexane	IRT-004S
2'-Methylacetophenone	577-16-2	100 µg/mL	Hexane	IRT-005S

CFCs and Refrigerants

Refrigerants - Chlorofluorohydrocarbons (CFCs)

Chlorofluorohydrocarbons (CFCs) are ozone-depleting substances that were used primarily in air-conditioning and refrigeration systems. Under the Clean Air Act, CFCs were to be phased out of production in the U.S. by January 1, 1996. In order to monitor various refrigerants that may be present in the environment, the following single and multi-component mixes are offered to help labs screen for these compounds.

Compound	CAS No.	Conc.	Solvent	Cat. No.	1 mL
Bromochlorodifluoromethane	353-59-3	0.2 mg/mL	MeOH	M-REF-X-01	
Bromotrifluoromethane (Freon #13b1)	75-63-8	0.2 mg/mL	MeOH	M-REF-01	
1-Chloro-1,1-difluoroethane (Freon #142b)	75-68-3	0.2 mg/mL	MeOH	M-REF-02	
2-Chloro-1,1,1,2-tetrafluoroethane (Freon #124)	2837-89-0	0.2 mg/mL	MeOH	M-REF-X-02	
Chlorodifluoromethane (Freon #22)	75-45-6	0.2 mg/mL	MeOH	M-REF-03	
Chloroethane (Freon #160)	75-00-3	0.2 mg/mL	MeOH	M-REF-04	
Chloromethane	74-87-3	0.2 mg/mL	MeOH	M-REF-05	
Chloropentafluoroethane	76-15-3	0.2 mg/mL	MeOH	M-REF-06	
Chlorotrifluoromethane (Freon #13)	75-72-9	0.2 mg/mL	MeOH	M-REF-07	
1,2-Dibromotetrafluoroethane	124-73-2	0.2 mg/mL	MeOH	M-REF-X-03	
1,1-Dichloro-1-fluoroethane (Freon #141B)	1717-00-6	0.2 mg/mL	MeOH	M-REF-X-04	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon #114)	76-14-2	0.2 mg/mL	MeOH	M-REF-10	
2,2-Dichloro-1,1,1-trifluoroethane (Freon #123)	306-83-2	0.2 mg/mL	MeOH	M-REF-X-05	
Dichlorodifluoromethane (Freon #12)	75-71-8	0.2 mg/mL	MeOH	M-REF-08	
Dichlorofluoromethane (Freon #21)	75-43-4	0.2 mg/mL	MeOH	M-REF-09	
1,1-Difluoroethane (Freon 152a)	75-37-6	0.2 mg/mL	MeOH	M-REF-11	
Pentafluoroethane (Freon #125)	354-33-6	0.2 mg/mL	MeOH	M-REF-X-06	
1,1,2,2-Tetrafluoroethane (Freon #134)	359-35-3	0.2 mg/mL	MeOH	M-REF-X-07	
Tetrafluoroethane	811-97-2	0.2 mg/mL	MeOH	M-REF-12	
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.2 mg/mL	MeOH	M-REF-14	
		2.0 mg/mL	MeOH	M-REF-14-10X	
Trichlorofluoromethane	75-69-4	0.2 mg/mL	MeOH	M-REF-13	
1,1,1-Trifluoroethane (Freon #143A)	420-46-2	0.2 mg/mL	MeOH	M-REF-X-08	
Trifluoromethane (Freon #23)	75-46-7	0.2 mg/mL	MeOH	M-REF-15	



Refrigerant Solutions (CFCs)

Individuals

Each at 0.2 mg/mL in MeOH

1 mL

Set

M-REF-SET

Each at 0.2 mg/mL in MeOH

15 x 1 mL

(below 15 comps.)

Multi-Component Solution

M-REF

0.2 mg/mL each in MeOH

1 x 1 mL

(below 15 comps.)

Freon #	Compound	Cat. No.
13b1	Bromotrifluoromethane (01)	M-REF-01
142b	1-Chloro-1,1-difluoroethane (02)	M-REF-02
22	Chlorodifluoromethane (03)	M-REF-03
160	Chloroethane (04)	M-REF-04
40	Chloromethane (05)	M-REF-05
115	Chloropentafluoroethane (06)	M-REF-06
13	Chlorotrifluoromethane (07)	M-REF-07
12	Dichlorodifluoromethane (08)	M-REF-08
21	Dichlorofluoromethane (09)	M-REF-09
114	1,2-Dichloro-1,1,2,2-tetrafluoroethane (10)	M-REF-10
152a	1,1-Difluoroethane (11)	M-REF-11
134a	Tetrafluoroethane (12)	M-REF-12
11	Trichlorofluoromethane (13)	M-REF-13
113	1,1,2-Trichloro-1,2,2-trifluoroethane (14)	M-REF-14
23	Trifluoromethane (15)	M-REF-15

Additional Individual Refrigerant Solutions (CFCs)

Individuals

Each at 0.2 mg/mL in MeOH

1 mL

Set

M-REF-X-R1-SET

Each at 0.2 mg/mL in MeOH

set of 9 x 1 mL

(below 9 comps.)

Multi-Component Solution

M-REF-X

0.2 mg/mL each in MeOH

1 x 1 mL

(below 8 comps., not including Freon 113a)

Freon #	Compound	Cat. No.
12B1	Bromochlorodifluoromethane	M-REF-X-01
124	2-Chloro-1,1,1,2-tetrafluoroethane	M-REF-X-02
114B2	1,2-Dibromotetrafluoroethane	M-REF-X-03
141b	1,1-Dichloro-1-fluoroethane	M-REF-X-04
123	2,2-Dichloro-1,1,1-trifluoroethane	M-REF-X-05
125	Pentafluoroethane	M-REF-X-06
134	1,1,2,2-Tetrafluoroethane	M-REF-X-07
113a	1,1,1-Trichlorotrifluoroethane (Freon 113a)	M-REF-X-09
143a	1,1,1-Trifluoroethane	M-REF-X-08

Qualitative Analysis Kits

PolyStandard™



These PolyStandard™ Kits were originally produced by Dr. Seaton Preston of the PolyScience Analytical Division 40 years ago. In 1999 AccuStandard acquired this division and renamed it PolyStandard. This selection of kits for qualitative and retention time analysis, and enables identification of unknown components or to analysis of a broad range of chemicals. All kits are in either vials or ampules and each kit includes an empty transfer vial.

Alcohols

C₁-C₅ Alcohols

PS-111C-R1-SET

14 ampules

Neats at 1 mL each.

- (01) Methanol
- (02) Ethanol
- (03) 1-Propanol
- (04) 2-Propanol
- (05) 1-Butanol
- (06) 2-Butanol
- (07) 2-Methyl-1-propanol
- (08) 2-Methyl-2-propanol
- (09) 1-Pentanol
- (10) 2-Pentanol
- (11) 3-Pentanol
- (12) 2-Methyl-1-butanol
- (13) 3-Methyl-1-butanol
- (14) 2-Methyl-2-butanol

C₆-C₈ Alcohols

PS-131C-R1-SET

14 ampules

Neats at 1 mL each.

- (01) 1-Hexanol
- (02) 2-Hexanol
- (03) 3-Hexanol
- (04) 2-Methyl-1-pentanol
- (05) 4-Methyl-2-pentanol
- (06) 2-Methyl-3-pentanol
- (07) 3-Methyl-3-pentanol
- (08) 2-Ethyl-1-butanol
- (09) 3,3-Dimethyl-2-butanol
- (10) 1-Heptanol
- (11) 2-Heptanol
- (12) 2,4-Dimethyl-3-pentanol
- (13) 1-Octanol
- (14) 2-Octanol

nC₆-C₂₂ Alcohols

PS-121C-R1-SET

14 ampules

Neat at 10 mg each. Solutions are weight % in Ethylbenzene, 1 mL each.

- | | |
|---------------------|------|
| (01) 1-Hexanol | Neat |
| (02) 1-Heptanol | Neat |
| (03) 1-Octanol | Neat |
| (04) 1-Nonanol | Neat |
| (05) 1-Decanol | Neat |
| (06) 1-Undecanol | Neat |
| (07) 1-Dodecanol | 10% |
| (08) 1-Tridecanol | 10% |
| (09) 1-Tetradecanol | 10% |
| (10) 1-Pentadecanol | 10% |
| (11) 1-Hexadecanol | 10% |
| (12) 1-Octadecanol | 5% |
| (13) 1-Eicosanol | 5% |
| (14) 1-Docosanol | 5% |

Aromatics

Aromatics C₆-C₁₆

PS-251C-R1-SET

14 ampules

Neats at 1 mL each.

- (01) Benzene
- (02) Toluene
- (03) *o*-Xylene
- (04) *m*-Xylene
- (05) *p*-Xylene
- (06) Ethylbenzene
- (07) Cumene
- (08) Mesitylene
- (09) *p*-Cymene
- (10) *n*-Propylbenzene
- (11) *n*-Butylbenzene
- (12) *n*-Hexylbenzene
- (13) *n*-Octylbenzene
- (14) *n*-Decylbenzene

Ketones

Normal Ketones

PS-411C-R1-SET

14 ampules

Neats at 1 mL each.

- (01) 2-Butanone
- (02) 2-Pentanone
- (03) 3-Pentanone
- (04) 2-Hexanone
- (05) 2-Heptanone
- (06) 3-Heptanone
- (07) 4-Heptanone
- (08) 2-Octanone
- (09) 3-Octanone
- (10) 2-Nonanone
- (11) 5-Nonanone
- (12) 2-Methylcyclohexanone
- (13) 3-Methylcyclohexanone
- (14) 4-Methylcyclohexanone

Branched Ketones

PS-421D-R1-SET

14 ampules

Neats at 1 mL each.

- (01) 3-Methyl-2-butanone
- (02) 3,3-Dimethyl-2-butanone
- (03) 2-Methyl-3-pentanone
- (04) 4-Methyl-2-pentanone
- (05) 2,4-Dimethyl-3-pentanone
- (06) 2-Methyl-3-hexanone
- (07) 5-Methyl-2-hexanone
- (08) 2-Methyl-3-heptanone
- (09) 5-Methyl-3-heptanone
- (10) 2,6-Dimethyl-4-heptanone
- (11) Mesityl oxide
- (12) Acetophenone
- (13) Cyclopentanone
- (14) Cyclohexanone

Food Additives

Antioxidants

PS-920CX-R1-SET

15 vials

Neats at 10 mg each.

- (01) BHA (2 and 3-*tert*-Butyl-4-methoxy phenol)
- (02) BHT (2,6-*di-tert*-Butyl-4-methyl phenol)
- (03) 4-Hydroxymethyl-2,6-*di-tert*-butyl phenol
- (04) THBP (2,4,5-Trihydroxybutylphenone)
- (05) Ethoxyquin (1,2-Dihydro-6-ethoxy-2,2,4-trimethyl quinoline)
- (06) *tert*-Butyl hydroquinone
- (07) DLTDP (Dilaurylthiodipropionate)
- (08) Thiodipmpionic acid
- (09) Propyl gallate
- (10) Ascorbyl palmitate
- (11) Ascorbic acid
- (12) Erythorbic acid (*iso*-Ascorbic acid)
- (13) Tocopherols (mixed)
- (14) Glycine
- (15) Lecithin

Aromatics C₆-C₉

PS-252C-R1-SET

14 ampules

Neats at 1 mL each.

- (01) Toluene
- (02) *o*-Xylene
- (03) *m*-Xylene
- (04) *p*-Xylene
- (05) Ethylbenzene
- (06) Cumene
- (07) Mesitylene
- (08) *n*-Propylbenzene
- (09) 1,2,4-Trimethylbenzene
- (10) 1,2,3-Trimethylbenzene
- (11) 1-Ethyl-2-Methylbenzene
- (12) 1-Ethyl-3-Methylbenzene
- (13) 1-Ethyl-4-Methylbenzene
- (14) Benzene

Capillary Column Probe Solutions (also Grob Mixes)

AccuStandard has assembled the following test mixtures based on suggestions by Grob 1 and 2 for evaluating capillary column performance. The alkanes in these mixtures can be used for evaluating instrumental effects and determining separation number and efficiency (PS-CP-02-1ML, PS-CP-03-1ML, PS-CP-04-1ML, PS-CP-05A-1ML, PS-CP-06A-1ML). Grob 2 has suggested a more complete mixture, the Non-Polar Columns Test Mix PS-CP-01-1ML provides a more complete capillary column test because a wider variety of organic compounds are included.

Alkane C₈-C₁₂ Mixture

PS-CP-02-1ML 1 mL

0.5 mg/mL each in *n*-Hexane

5 comps.

- | | |
|--------|----------|
| Octane | Undecane |
| Nonane | Dodecane |
| Decane | |

Alkane C₁₃-C₂₀ Mixture

PS-CP-03-1ML 1 mL

0.5 mg/mL each in *n*-Hexane

8 comps.

- | | |
|-------------|-------------|
| Tridecane | Heptadecane |
| Tetradecane | Octadecane |
| Pentadecane | Nonadecane |
| Hexadecane | Eicosane |

Alkane C₆-C₄₀ Mixture

PS-CP-06A-1ML 1 mL

0.5 mg/mL each in *n*-Hexane

23 comps.

- | | |
|-------------|-------------------|
| Octane | Eicosane |
| Nonane | Docosane |
| Decane | Tetracosane |
| Undecane | Hexacosane |
| Dodecane | Octacosane |
| Tridecane | Triacontane |
| Tetradecane | Dotriacontane |
| Pentadecane | Tettratriacontane |
| Hexadecane | Hexatriacontane |
| Heptadecane | Octatriacontane |
| Octadecane | Tetracontane |
| Nonadecane | |

Alkane C₂₂-C₃₂

PS-CP-04-1ML 1 mL

0.5 mg/mL each in *n*-Hexane

6 comps.

- | | |
|-------------|---------------|
| Docosane | Octacosane |
| Tetracosane | Triacontane |
| Hexacosane | Dotriacontane |

Alkane C₃₄-C₄₄

PS-CP-05A-1ML 1 mL

0.5 mg/mL each in *n*-Hexane

4 comps.

- | | |
|-------------------|-----------------|
| Tettratriacontane | Octatriacontane |
| Hexatriacontane | Tetracontane |

Non-Polar Columns

Test Mix

PS-CP-01-1ML 1 mL

At the stated conc. in CH₂Cl₂

12 comps.

- | | |
|----------------------|------------|
| Methyl decanoate | 0.42 mg/mL |
| Methyl undecanoate | 0.42 mg/mL |
| Methyl dodecanoate | 0.41 mg/mL |
| 2,3-Butanediol | 0.53 mg/mL |
| Dicyclohexylamine | 0.31 mg/mL |
| 2,6-Dimethylaniline | 0.32 mg/mL |
| 2,6-Dimethylphenol | 0.32 mg/mL |
| 2-Ethylhexanoic acid | 0.38 mg/mL |
| Nonanal | 0.40 mg/mL |
| Octanol | 0.36 mg/mL |
| Undecane | 0.29 mg/mL |
| Decane | 0.28 mg/mL |

Contains interactive and labile components.

Refrigerate when not in use.



Qualitative Analysis Kits

PolyStandard™

Hydrocarbons

Alkanes nC_6 - nC_{19}

PS-211C-R1-SET

14 ampules

Neats at 1 mL each. Solutions are weight % in Ethylbenzene, 1 mL each.

(01) <i>n</i> -Hexane	Neat
(02) <i>n</i> -Heptane	Neat
(03) <i>n</i> -Octane	Neat
(04) <i>n</i> -Nonane	Neat
(05) <i>n</i> -Decane	Neat
(06) <i>n</i> -Undecane	Neat
(07) <i>n</i> -Dodecane	Neat
(08) <i>n</i> -Tridecane	Neat
(09) <i>n</i> -Tetradecane	Neat
(10) <i>n</i> -Pentadecane	Neat
(11) <i>n</i> -Hexadecane	10%
(12) <i>n</i> -Heptadecane	10%
(13) <i>n</i> -Octadecane	10%
(14) <i>n</i> -Nonadecane	10%

Alkenes C_8 - C_{22}

PS-241D-R1-SET

14 vials

Neats at the stated quantities.

(01) 2,4,4-Trimethylpentene-1	1 mL
(02) 2,4,4-Trimethylpentene-2	0.5 mL
(03) Nonene-1	0.5 mL
(04) Nonene-4 (<i>cis</i> , <i>trans</i>)	0.5 mL
(05) 3,5,5-Trimethyl-1-hexene	0.5 mL
(06) Decene-1	1 mL
(07) Undecene-1	1 mL
(08) Dodecene-1	1 mL
(09) Tridecene-1	1 mL
(10) Tetradecene-1	1 mL
(11) Hexadecene-1	1 mL
(12) Octadecene-1	1 mL
(13) Eicosene-1	1 mL
(14) Docosene-1	0.5 mL

Alkanes nC_{19} - nC_{40}

PS-261C-R1-SET

14 ampules

At the stated conc. by weight % in Ethylbenzene, 1 mL each.

(01) <i>n</i> -Nonadecane	10%
(02) <i>n</i> -Eicosane	10%
(03) <i>n</i> -Heneicosane	10%
(04) <i>n</i> -Docosane	10%
(05) <i>n</i> -tricosane	10%
(06) <i>n</i> -Tetracosane	10%
(07) <i>n</i> -Pentacosane	10%
(08) <i>n</i> -Hexacosane	10%
(09) <i>n</i> -Octacosane	10%
(10) <i>n</i> -triacontane	1%
(11) <i>n</i> -Dotriacontane	1%
(12) <i>n</i> -Hexatriacontane	1%
(13) <i>n</i> -Octatriacontane	1%
(14) <i>n</i> -Tetracontane	1%

Naphthenes C_5 - C_{10}

PS-281C-R1-SET

14 ampules

Neats at 1 mL each.

(01) Cyclopentane
(02) Methylcyclopentane
(03) Cyclohexane
(04) Methylcyclohexane
(05) <i>cis</i> -1,2-Dimethylcyclohexane
(06) <i>trans</i> -1,2-Dimethylcyclohexane
(07) <i>cis</i> & <i>trans</i> -1,3-Dimethylcyclohexane
(08) <i>cis</i> & <i>trans</i> -1,4-Dimethylcyclohexane
(09) Ethylcyclohexane
(10) <i>n</i> -Propylcyclohexane
(11) <i>iso</i> -Propylcyclohexane
(12) <i>n</i> -Butylcyclohexane
(13) <i>iso</i> -Butylcyclohexane
(14) <i>tert</i> -Butylcyclohexane

Sugars & Sugar Alcohols

Sugars & Sugar Alcohols

PS-960C-R1-SET

15 vials

Neats at 10 mg each.

(01) D-Xylose
(02) D-Ribose
(03) L-Arabinose
(04) D-Fructose
(05) D-Galactose
(06) α -D-Glucose
(07) D-Mannose
(08) L-Rhamnose monohydrate
(09) L-Sorbose
(10) Xylitol
(11) Ribitol (Adonitol)
(12) D-Arabitol
(13) L-Arabitol
(14) D-Mannitol
(15) D-Sorbitol

Glycols & Glycol Ethers

Glycols C_3 - C_{12}

PS-151C-SET

15 ampules

Neats at 1 mL each. Solutions at the stated conc. by weight % in MeOH, at 1 mL each.

(01) 1,2-Propanediol	Neat	(09) 1,6-Hexanediol	10%
(02) 1,3-Propanediol	Neat	(10) 2,5-Hexanediol	10%
(03) 1,2-Butanediol	Neat	(11) 1,7-Heptanediol	10%
(04) 1,3-Butanediol	Neat	(12) 1,8-Octanediol	10%
(05) 1,4-Butanediol	Neat	(13) 1,9-Nonanediol	10%
(06) 2,3-Butanediol	Neat	(14) 1,10-Decanediol	10%
(07) 1,5-Pentanediol	Neat	(15) 1,12-Dodecanediol	10%
(08) 2,4-Pentanediol	Neat		

Glycols Ethers C_3 - C_{10}

PS-160C-R1-SET

15 ampules

Neats at 1 mL each.

(01) Ethylene glycol methyl ether (2-Methoxyethanol)	
(02) Ethylene glycol ethyl ether (2-Ethoxyethanol)	
(03) Ethylene glycol <i>n</i> -butyl ether (2- <i>n</i> -Butoxyethanol)	
(04) Ethylene glycol <i>n</i> -hexyl ether (2-Hexoxyethanol)	
(05) Ethylene glycol phenyl ether (2-Phenoxyethanol)	
(06) Diethylene glycol methyl ether [2-(2-Methoxyethoxy)-ethanol]	
(07) Diethylene glycol ethyl ether [2-(2-Ethoxyethoxy)-ethanol]	
(08) Diethylene glycol <i>n</i> -butyl ether [2-(2- <i>n</i> -Butoxyethoxy)-ethanol]	
(09) Diethylene glycol <i>n</i> -hexyl ether [2-(2- <i>n</i> -Hexoxyethoxy)-ethanol]	
(10) Propylene glycol methyl ether (1-Methoxy-isopropanol)	
(11) Propylene glycol <i>n</i> -propyl ether (1-Propoxy-isopropanol)	
(12) Propylene glycol <i>n</i> -butyl ether (1- <i>n</i> -Butoxy-isopropanol)	
(13) Dipropylene glycol methyl ether [1-(1-Methoxyisopropoxy)isopropanol]	
(14) Tripropylene glycol methyl ether	
(15) Glycol ethers Mixture PS-16C	
<i>Neat at the stated weight %.</i>	
<i>Ethylene glycol ethyl ether 10%</i>	
<i>Ethylene glycol butyl ether 10%</i>	
<i>Diethylene glycol ethyl ether 30%</i>	
<i>Diethylene glycol butyl ether 50%</i>	

Aldehydes

Aldehydes

PS-450E-R2-SET

15 ampules

Solutions at the stated conc. by weight % in Toluene, at 1 mL each.

(01) Propionaldehyde (<i>Propanal</i>)	Neat
(02) Butyraldehyde (<i>Butanal</i>)	Neat
(03) Isobutyraldehyde (<i>2-Methylpropanal</i>)	Neat
(04) Valeraldehyde (<i>Pentanal</i>)	Neat
(05) Isovaleraldehyde (<i>3-Methylbutanal</i>)	Neat
(06) Caproic aldehyde (<i>Hexanal</i>)	Neat
(07) Enanthaldehyde (<i>Heptanal</i>)	Neat
(08) Caprylaldehyde (<i>Octanal</i>)	Neat
(09) Pelargonaldehyde (<i>Nonanal</i>)	Neat
(10) Capraldehyde (<i>Decanal</i>)	10%
(11) Undecylaldehyde (<i>Hendecanal</i>)	10%
(12) Lauraldehyde (<i>Dodecanal</i>)	10%
(13) Tridecylaldehyde (<i>Tridecanal</i>)	10%
(15) Benzaldehyde (<i>Benzenecarbonal</i>)	Neat

Qualitative Analysis Kits

PolyStandard™



Acids & Esters

Saturated Fatty Acids

Methyl Ester

SFA-N-SET 18 vials

Neats at 100 mg each.

- (01) Methyl octanoate (Caprylate) C8:0
- (02) Methyl nonanoate (Pelargonate) C9:0
- (03) Methyl decanoate (Caprate) C10:0
- (04) Methyl undecanoate C11:0
- (05) Methyl dodecanoate (Laurate) C12:0
- (06) Methyl tridecanoate C13:0
- (07) Methyl tetradecanoate (Myristate) C14:0
- (08) Methyl pentadecanoate C15:0
- (09) Methyl hexadecanoate (Palmitate) C16:0
- (10) Methyl heptadecanoate (Margarate) C17:0
- (11) Methyl octadecanoate (Stearate) C18:0
- (12) Methyl 12-hydroxystearate C18:0
- (13) Methyl nonadecanoate C19:0
- (14) Methyl eicosanoate (Arachidate) C20:0
- (15) Methyl heneicosanoate C21:0
- (16) Methyl docosanoate (Behenate) C22:0
- (17) Methyl tricosanoate C23:0
- (18) Methyl tetracosanoate (Lignocerate) C24:0

Mixture

SFA-N-SET 18 vials

Mixture at 100 mg each.

Ethyl Esters

PS-621C-R1-SET 14 vials

Solution at stated conc. by weight % in Hexane in 1 mL. Neats at 1 mL each.

- | | |
|------------------------|------|
| (01) Ethyl acetate | Neat |
| (02) Ethyl propionate | Neat |
| (03) Ethyl butyrate | Neat |
| (04) Ethyl valerate | Neat |
| (05) Ethyl caproate | Neat |
| (06) Ethyl heptanoate | Neat |
| (07) Ethyl caprylate | Neat |
| (08) Ethyl pelargonate | Neat |
| (09) Ethyl caprate | Neat |
| (10) Ethyl undecanoate | Neat |
| (11) Ethyl laurate | Neat |
| (12) Ethyl myristate | 10% |
| (13) Ethyl palmitate | 10% |
| (14) Ethyl stearate | 10% |

Fatty Acids C₃-C₁₈

PS-651C-R1-SET 14 vials

Neat at the stated quantities

- | | |
|--------------------------|-------|
| (01) Propionic acid | 1 mL |
| (02) Butyric acid | 1 mL |
| (03) Valeric acid | 1 mL |
| (04) Caproic acid | 1 mL |
| (05) Heptanoic acid | 1 mL |
| (06) Caprylic acid | 1 mL |
| (07) Pelargonic acid | 1 mL |
| (08) Capric acid | 1 mL |
| (09) n-Hendecanoic acid | 1 mL |
| (10) 10-Hendecenoic acid | 10 mg |
| (11) Lauric acid | 10 mg |
| (12) Myristic acid | 10 mg |
| (13) Palmitic acid | 10 mg |
| (14) Stearic acid | 10 mg |

Dicarboxylic Acids

PS-670CX-R1-SET 15 vials

Neats at 10 mg each.

- (01) Oxalic acid
- (02) Malonic acid
- (03) Maleic acid
- (04) Fumaric acid
- (05) Succinic acid
- (06) Glutaric acid
- (07) Adipic acid
- (08) Pimelic acid
- (09) Suberic acid
- (10) Azelaic acid
- (11) Sebacic acid
- (12) 1,12-Dodecanedioic acid
- (13) Phthalic acid
- (14) Isophthalic acid
- (15) Terephthalic acid

Amino Acids

L-Amino Acid Kit

PS-970C-R1-SET 22 vials

Neats at 10 mg each.

- (01) L-Alanine
- (02) L-Arginine
- (03) L-Asparagine
- (04) L-Aspartic acid
- (05) L-Cysteine
- (06) L-Cystine
- (07) L-Glutamic acid
- (08) L-Glutamine
- (09) Glycine
- (10) L-Histidine
- (11) trans-4-Hydroxy-L-proline
- (12) L-Isoleucine
- (13) L-Leucine
- (14) L-Lycine
- (15) L-Methionine
- (16) L-Phenylalanine
- (17) L-Proline
- (18) L-Serine
- (19) L-Threonine
- (20) L-Tryptophan
- (21) L-Tyrosine
- (22) L-Valine

Phenols

PS-170D-R1-SET 14 vials

At the stated quantities and conc. by weight % in Toluene.

- | | |
|----------------------------|-----------|
| (01) Phenol | 1 mL/Neat |
| (02) o-Cresol | 1 mL/Neat |
| (03) m-Cresol | 1 mL/Neat |
| (04) p-Cresol | 1 mL/Neat |
| (05) o-Ethylphenol | 1 mL/10% |
| (06) p-Ethylphenol | 1 mL/10% |
| (07) 2-iso-Propylphenol | 1 mL/10% |
| (08) 2,3-Xylenol | 1 mL/10% |
| (09) 2,4-Xylenol | 1 mL/10% |
| (10) 2,5-Xylenol | 1 mL/10% |
| (11) 2,6-Xylenol | 1 mL/10% |
| (12) 3,4-Xylenol | 1 mL/10% |
| (13) 3,5-Xylenol | 1 mL/10% |
| (14) 2,3,5-Trimethylphenol | 1 mL/5% |

Pesticides & Herbicides

Chlorinated Pesticides

PS-510D-R1-SET

15 ampoules

Solution at 0.1% in MeOH, 1 mL each.

- (01) DDT
- (02) BHC
- (03) DDE
- (04) Endrin
- (05) Lindane
- (06) Toxaphene
- (07) Chlordane
- (08) Methoxychlor
- (09) Heptachlor
- (10) Strobane
- (11) Aldrin
- (12) Dieldrin
- (13) TDE
- (14) Endosulfan (mix of isomers)
- (15) Chloropicrin

Organophosphorus

Insecticides

PS-520E-R1-SET

13 ampoules

Solution at 0.1% in MeOH, 1 mL each.

- (01) Methyl Parathion
- (02) Ethion
- (03) Co-Ral
- (04) Guthion (Azinphos methyl)
- (05) Di-Syston (Disulfoton)
- (06) Phosdrin
- (07) Naled (Dibrom)
- (08) Diazinon
- (09) DDVP (Vapona) (Dichlorvos)
- (11) Cygon
- (12) Malathion
- (13) Zolone
- (15) Phorate (Thimet)

Capillary Column Probe Solutions (also Grob Mixes)

The PS-CP-01 mixture provides a more complete capillary column test because a wider variety of organic compounds is included. Test mixture PS-CP-01 contains interactive and labile components. Refrigerate when not in use.

Non-Polar Columns

Test Mix

PS-CP-01-1ML 1 mL

At the stated conc. in CH₂Cl₂ 12 comps.

- | | |
|----------------------|------------|
| Methyl decanoate | 0.42 mg/mL |
| Methyl undecanoate | 0.42 mg/mL |
| Methyl dodecanoate | 0.41 mg/mL |
| 2,3-Butanediol | 0.53 mg/mL |
| Dicyclohexylamine | 0.31 mg/mL |
| 2,6-Dimethylaniline | 0.32 mg/mL |
| 2,6-Dimethylphenol | 0.32 mg/mL |
| 2-Ethylhexanoic acid | 0.38 mg/mL |
| Nonanal | 0.40 mg/mL |
| Octanol | 0.36 mg/mL |
| Undecane | 0.29 mg/mL |
| Decane | 0.28 mg/mL |

Sulfur Compounds

PS-710C-R1-SET

14 ampoules

Neats at 1 mL each.

- (01) iso-Propyl mercaptan
- (02) n-Propyl mercaptan
- (03) iso-Butyl mercaptan
- (04) n-Butyl mercaptan
- (05) sec-Butyl mercaptan
- (06) tert-Butyl mercaptan
- (07) n-Amyl mercaptan
- (08) tert-Amyl mercaptan
- (09) n-Hexyl mercaptan
- (10) n-Heptyl mercaptan
- (11) Ethyl sulfide
- (12) Allyl sulfide
- (13) Di-n-propyl sulfide
- (14) Di-n-butyl sulfide

Calibration Mixture

PS-71C 1 mL vial

Neat at the stated weight % listed

Mercaptan Mixture PS-71C

- | | |
|---------------------|-------|
| Ethyl mercaptan | 13.4% |
| n-Propyl mercaptan | 22.4% |
| iso-Butyl mercaptan | 28.6% |
| n-Butyl mercaptan | 35.6% |

Phthalate Esters

PS-840C-R1-SET

15 vials

Neats at 1 mL each.

- (01) Dimethyl phthalate
 - (02) Diethyl phthalate
 - (03) Di-n-propyl phthalate
 - (04) Di-iso-propyl phthalate
 - (05) Di-n-butyl phthalate
 - (06) Di-iso-butyl phthalate
 - (07) Dipentyl phthalate
 - (08) Dihexyl phthalate
 - (09) Diheptyl phthalate
 - (10) Dioctyl phthalate
 - (11) Dinonyl phthalate
 - (12) Didecyl phthalate
 - (13) Diundecyl phthalate
 - (14) Didodecyl phthalate
 - (15) Phthalate Mixture PS-84C
- Neat at stated weight %
- | | |
|-----------------------|-------|
| Dimethyl phthalate | 16.7% |
| Diethyl phthalate | 16.7% |
| Di-n-propyl phthalate | 33.3% |
| Di-n-butyl phthalate | 33.3% |

Calibration Mixture

PS-84C-1ML 1 mL vial

Neat at the stated weight % listed above.

PCBs

PS-590D-R1-SET

15 ampoules

At 100 µg/mL in MeOH, 1 mL each.

- (01) Aroclor 1016
- (02) Aroclor 1221
- (03) Aroclor 1232
- (04) Aroclor 1242
- (05) Aroclor 1248
- (06) Aroclor 1254
- (07) Aroclor 1260
- (08) p,p-DDT
- (09) p,p'-DDE
- (10) p,p'-TDE
- (11) Heptachlor
- (12) Heptachlor epoxide
- (13) Aldrin
- (14) Dieldrin
- (15) Lindane

Environmental Protection Agency (EPA) Methods

Table of Contents

Analytes in EPA Methods		Pages 114-124
CLP Volatiles (including OLM 4.1 & 4.2)		126-129
CLP Semi-Volatiles (including OLM 4.1 & 4.2)		130-136
CLP Pesticides & PCBs		137-139
500 Series	Method Standards for Drinking Water	141-168
501	Trihalomethanes (ECD or PID/ELCD)	141
502.2	Volatiles (PID/ELCD) & Volatile Surrogates & Internal Standards	142-145
503.1	VOC - Aromatics & Alkenes (PID/ELCD)	146
504	EDB & DBCP (ECD)	146
504.1	EDB, DBCP, TCP (ECD)	146
505	Organohalide Pesticides & Aroclors (ECD)	146
506	Phthalate Esters	146
507	Nitrogen/Phosphorous Pesticides (NPD)	147
508 and 508A	Chlorinated Pesticides & Aroclors (ECD)	148
508.1	Chlorinated Pesticides, Herbicides & Organo-halides (ECD)	149
509	Ethylene thiourea (ECD)	149
515.1 and 515.2	Chlorinated Pesticides (ECD)	150
515.3 and 515.4	Chlorinated Acids (ECD)	151
521	Nitrosamines (SPE & Capillary Column GC)	152
524.2	Volatiles (GC/MS)	152
524.3	Purgeable Organic Compounds (GC/MS)	152
525.1	Semi-Volatiles, PCB Congeners, Chlorinated Pesticides (GC/MS)	153
525.2	Semi-Volatiles, PCB Congeners, Pesticides (GC/MS)	154-156
526	Semi-Volatiles (GC/MS)	157
527	Pesticides & Flame Retardants (SPE & Capillary GC/MS)	157
528	Phenols (GC/MS)	158
529	Explosives & Related Compounds (SPE & Capillary GC/MS)	158
531 & 531.1	Carbamates (HPLC)	159
532	Phenylureas (HPLC)	159
535	Acetamide-Herbicide Degradates (LCMS)	159
547	Glyphosate (HPLC)	160
548	Endothall (ECD)	160
548.1	Endothall (GC/MS)	160
549.1/549.2	Diquat & Paraquat (HPLC)	160
550 & 550.1	Polynuclear Aromatic Hydrocarbons (HPLC)	160
551	Chlorinated Solvents, also Trihalomethanes (ECD)	160
551.1A	Disinfection By-products (ECD)	161
552 & 552.1	Haloacetic acids (ECD)	162
552.2	Haloacetic acids & Dalapon (ECD)	163
553	Benzidines & Nitrogen Pesticides (HPLC/MS)	164
554	Derivatized Carbonyl Compounds (HPLC)	164
555	Chlorinated Pesticides (HPLC)	164
556 & 556.1	Carbonyl Compounds (GC/ECD)	164
National Primary Drinking Water Standards		166-167
EPA Consent Decree Water Protocol		168
600 Series	Method Standards for Wastewater	169-180
601	Purgeable Halocarbons by Purge & Trap (ELCD)	170
601/602	Purgeable Halocarbons (ELCD)	171
603	Acrolein & Acrylonitrile (FID)	172
604	Phenols (FID), Phenols as PFB Derivatives (ECD)	172
604.1	Hexachlorophene & Dichloroprene (HPLC)	XXX
605	Benzidines (HPLC)	172
606	Phthalate Esters (ECD)	172
607	Nitrosamines (NPD)	172
608	Pesticides & PCBs (ECD)	172
608.1, 608.2	Pesticides (ECD)	173
609	Nitroaromatics & Isophorone (ECD/FID)	173
610	Polynuclear Aromatic Hydrocarbons (FID/HPLC)	173
611	Haloethers (ECD/ELCD)	173
612	Chlorinated Hydrocarbons (ECD)	173
613	Dioxin (2,3,7,8-TCDD) (GC/MS)	173
614, 614.1	Organophosphorus Pesticides (NPD)	173
615	Chlorinated Herbicides (ECD)	174
617	Chlorinated Pesticides & PCB's (ECD)	174
618	Volatile Pesticides (ECD)	174
619	Triazine Herbicides (NPD)	174
620	Diphenylamine (NPD)	174
622	Organophosphorus Pesticides (NPD)	174
622.1	Thiophosphate Pesticides (NPD)	175
624	Purgeable Volatiles (GC/MS)	175
625	BN/A Semivolatiles, Pesticides, Aroclors (GC/MS)	176-179
627	Dinitroaniline Pesticides (ECD)	179
629	Cyanazine (HPLC)	180
631	Carbendazim (HPLC)	180
632	Carbamates & Urea Pesticides (HPLC)	179
632.1	Carbamates & Amides (HPLC)	179
633	Organonitrogen Pesticides (NPD)	179
634	Thiocarbamate Pesticides (NPD)	179
635	Rotenone (HPLC)	180
636	Bensulide (HPLC)	180
638	Oryzalin (HPLC)	180
639	Bendiocarb (HPLC)	180

Environmental Protection Agency (EPA) Methods

Table of Contents

600 Series	Method Standards for Wastewater	Pages 169-180
640	Mercaptobenzothiazole (HPLC)	180
641	Thiabendazole (HPLC)	180
642	Biphenyl & Phenylphenol (HPLC)	180
643	Bentazon (HPLC)	180
644	Picloram (HPLC)	180
645	Amine Pesticides & Lethane (NPD)	180
680	Pesticides & PCB Congeners (GC/MS)	180
1300 Series	Toxicity Characteristic Leaching Procedure	181-182
1311	TCLP	181-182
1312	Synthetic Leaching Procedure	182
1600 Series		183-194
1613	Dioxins & Furans (HRGC/HRMS)	183
1614	Polybrominated diphenyl ethers	184
1618	Organochloride & Phosphorus Pesticides	185
1653	Chlorinated Phenolics in Pulp & Paper	186
1656	Organo Halide Pesticides	186-187
1657	Organo Phosphorus Pesticides	188
1658	Phenoxy - acid Herbicides	189
1659	Dazomet	189
1664	Oil and Grease	189
1665	PMI Semi-Volatiles (GC/MS)	189
1666A	PMI Volatiles (GC/MS)	190
1667A	PMI Pollutants (HPLC)	191
1668	209 PCB Congeners (GC)	192-193
1671	PMI Semi-Volatiles (GC/FID)	194
1673	PEG-600 (HPLC)	194
5031	Azeotropic Distillation (GC/FID)	202
8000 Series	Method Standards for Solid Waste	195-240
8000, APP IX	Appendix IX Individual Analytes	196-197
8000, APP IX	Appendix IX Mixtures	197-198
8000	Volatile & Semi-Volatile Mixtures	198
8000 Series	Volatile Internal/Surrogate Standards	199
8010, 8010A/B	Halogenated Volatiles (ELCD)	200-201
8011	EDB & DBCP (GC/MS)	201
8015A, 8015B	Non Halogenated Organics (FID)	202
8020	Aromatic Volatiles (PID)	202
8021B	Halogenated Volatiles (PID/ELCD)	203-204
8030A	Acrolein & Acrylonitrile (FID)	204
8031	Acrylonitrile (NPD)	204
8032, 8032A	Acrylamide (ECD)	204
8033	Acetonitrile (NPD)	204
8040, 8040A	Phenols (FID)	205
8041	Phenols as PFB Derivatives (FID/ECD)	206
8060	Phthalate Esters (ECD)	206
8061A	Phthalate Esters (ECD)	206
8070A	Nitrosamines (NPD/TEA)	206
8080A	Organochlorine Pesticides & PCBs	207
8081/8081A/B	Organochlorine Pesticides (ECD)	207-211
8082	PCBs (ECD)	212
8085	Pesticides (AED)	213-214
8090	Nitroaromatics & Isophorone (TCD/FID)	214
8091	Nitroaromatics & Cyclic Ketones (ECD/NPD)	214
8095	Explosives (ECD)	215
8100	Polynuclear Aromatic Hydrocarbons (FID)	215
8110	Haloethers (FID)	215
8111	Haloethers (HECD)	216
8120, 8120A	Chlorinated Hydrocarbons (ECD)	216
8121	Chlorinated Hydrocarbons (ECD)	216
8131	Aniline & Derivatives (NPD/AFD/TSD)	216
8140	Organophosphorous Pesticides (NPD/AFD/FPD)	217
8141A	Additions to Method 8140 (GC/NPD)	217
8150A, 8150B	Chlorinated Herbicides (ECD)	218-219
8151/8151A	Chlorinated Herbicides (ECD)	220
8240, 8240A	Volatiles (GC/MS)	220
8240 & 8260	Combined Method Volatile Organics	221,224
8260B	Volatiles (GC/MS)	222-223
8270, 8270C/D	Semi-Volatile (GC/MS)	225-234
8272	PAHs (GC/MS)	235
8275A	Semi-Volatiles (Thermal Chromatography)	235
8280A	Dioxins & Furans (HRGC/LRMS)	235
8310	Polynuclear Aromatic Hydrocarbons (HPLC)	236
8315, 8315A	Ketones/Aldehydes (HPLC)	237
8316	Acrolein, Acrylamide, Acrylonitrile (HPLC)	237
8318	N-Methylcarbamates (HPLC)	237
8321	Solvent Extractable Non-Volatiles (HPLC)	238
8323	Organometallic Tin Analysis (Ion Trap MS)	238
8325	Benzidine & Nitrogen Pesticides (HPLC/MS)	238
8330	Explosives (HPLC)	239-240
8410	Semi-Volatiles (FTIR)	240
8430	bis(2-Chloroethyl)ether & Hydrolysis Products	240
8440	Total Petroleum Hydrocarbons (IR)	240



Analytes in EPA Methods

Alphabetical List of Individual Standards for EPA Methods

AccuStandard has compiled an easy to use alphabetical list of all the popular single component solutions available for EPA methods, alphabetized by Chemical Name. Additionally, the CAS number index in the back of the catalog can easily be used to find a component with multiple synonyms.

For a complete listing by product types see

- PCB Congeners (pages 3-6)
- PBDE Congeners (pages 26-28)

- Pesticides (pages 47-66)
- Appendix IX (pages 196-197)

If you would like a different solvent or concentration than is listed, contact Technical Service.

Solvent Key for Individual Solutions

M Methanol D Methylene chloride H Hexane W Water
A Acetone CN Acetonitrile MT *tert*-Butyl methyl ether



Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
Acenaphthene 83-32-9	100	M	APP-9-001		4-Aminobiphenyl 92-67-1	100	D	APP-9-011	
Acenaphthene-d ₁₀ 15067-26-2	1,000	M	APP-9-001-10X		Aminocarb 2032-59-9	100	CN	M-632-01	
Acenaphthylene 208-96-8	100	M	APP-9-002		2-Amino-4,6-dinitrotoluene 35572-78-2	100	M:CN	M-8330-13-0.1X	
Acephate 30560-19-1	1,000	M	APP-9-002-10X			1,000	M:CN	M-8330-13	
Acetaldehyde 75-07-0	100	A	P-200S-A		4-Amino-2,6-dinitrotoluene 19406-51-0	100	M:CN	M-8330-14-0.1X	
Acetaldehyde-DNPH 1019-57-4	1,000	A	P-200S-A-10X			1,000	M:CN	M-8330-14	
Acetochlor 34256-82-1	1,000	W	M-8315-01		4-Aminopyridine 504-24-5	100	M	P-407S	
Acetone 67-64	1,000	M	M-554-01 *		Anilazine 101-05-3	100	H:A	P-287S-H	
Acetone-DNPH 1567-89-1	1,000	M	M-8315-R-DNPH-01			80:20			
Acetonitrile 75-05-8	100	M:CN	M-554-DNPH-01		Aniline 62-53-3	100	M	APP-9-012	
Acetophenone 98-86-2	100	M	P-465S			1,000	M	APP-9-012-10X	
2-Acetylaminofluorene 53-96-3	100	M	APP-9-003 *		Aniline-d ₅ 4165-61-1	200	D	M-625-01	
Acifluorfen 50594-66-6	10,000	W	M-8015B/5031-01			2,000	D	M-625-01-10X	
Acifluorfen methyl ester 50594-67-7	100	CN	M-8315-R2-DNPH-02		Anthracene 120-12-7	100	M	APP-9-013	
Acrolein 107-02-8	100	M	APP-9-005			1,000	M	APP-9-013-10X	
Acrolein-DNPH 888-54-0	1,000	M	APP-9-005-10X		Anthracene-d ₁₀ 1719-06-8	200	D	M-625-02	
Acrylamide 79-06-1	100	M	APP-9-004		Aramite 140-57-8	100	M	P-132S	
Acrylonitrile 107-13-1	100	D	APP-9-004-20X		Asulam 3337-71-1	100	M	P-276S	
Alachlor 15972-60-8	2000	D	APP-9-006		Atrazine 1912-24-9	100	M	P-005S	
Alanap 132-66-1	100	M	P-245S			1,000	M	P-005S-10X	
Aldicarb 116-06-3	100	M	P-246S		Atrazine desethyl 6190-65-4	100	M	P-343S	
Aldicarb sulfone 1646-88-4	1,000	M	P-246S-10X		Atrazine-desisopropyl 1007-28-9	100	M	P-345S	
Aldicarb sulfoxide 1646-87-3	100	M:W	APP-9-007 *		Azamethiphos 35575-96-3	100	M	P-352S	
Aldrin 309-00-2	1,000	M:W	APP-9-007-10X *		Azinphos-ethyl 2642-71-9	100	M	P-201S	
Allethrin 584-79-2	100	CN	M-8315-R-DNPH-03			1,000	H	M-8141A-1-01	
Allyl alcohol 107-18-6	1,000	CN	M-8315-R-DNPH-03-10X		Azinphos-methyl 86-50-0	100	M	P-007S	
Allyl chloride 107-05-1	1,000	M	M-8032			1,000	H	M-8140-01	
Ametryn 834-12-8	100	M	P-102S		Azobenzene 103-33-3	2,000	D	Z-014B-1	
	1,000	M	P-102S-10X		Barbamate (Barban) 101-27-9	100	M	P-202S	
			P-274S			100	CN	M-632-02	
			M-531-06		Baycarb 3766-81-2	100	M	P-347S	
			M-531-02		Baygon 114-26-1	100	M	P-009S	
			P-131S			100	CN	M-531-07	
			M-531-01		Benazolin 3813-05-6	100	M	P-397S	
			P-002S		Bendiocarb 22781-23-3	100	M	P-203S	
			P-002S-10X			100	CN	M-639	
			P-267S		Benfluralin 1861-40-1	100	M	P-237S	
			M-8015B/5031-05		Benfuracarb 82560-54-1	100	M	P-454S	
			APP-9-010			1000	M	P-454S-10X	
			APP-9-010-20X		Benomyl 17804-35-2	100	CN	P-104S-CN *	
			P-003S		Bensulfuron-methyl 83055-99-6	100	M	P-597S	
			P-003S-10X						



Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
Bensulide 741-58-2	100	CN	M-636		Bromochlorodifluoromethane 353-59-3	200	M	M-REF-X-01	
Bentazon 25057-89-0	100	CN	M-643		Bromochloromethane 74-97-5	200	M	M-502-03	
Bentazon methyl 61592-45-8	100	A	P-177S-A			2,000	M	M-502-03-10X	
Benz[a]anthracene 56-55-3	100	M	P-241S		2-Bromo-1-chloropropane 3017-95-6	200	M	M-624-SS-04	
	1,000	M				20,000	M	M-001R-3	
Benz[a]anthracene-d₁₂ 1718-53-2	200	D	APP-9-016		Bromodichloroacetic acid 71133-14-7	40	MT	M-552.2A-02	
	2,000	D	APP-9-016-10X		Bromodichloromethane 75-27-4	200	M	M-502-04	
Benzaldehyde-DNPH 1157-84-2	100	M-625-03	M-625-03-10X			2,000	M	M-502-04-10X	
Benzene 71-43-2	200	CN	M-8315-R-DNPH-04		4-Bromo-3,5-dimethylphenyl-N-methylcarbamate 672-99-1	100	CN	M-531-IS	
	2,000	M	M-502-01		p-Bromofluorobenzene 460-00-4	100	A	M-551.1-IS	
Benzene-d₆ 1076-43-3	200	M	M-502-01-10X			200	M	M-624-SS-03	
	2,000	M	M-624-SS-01		Bromoform 75-25-2	200	M	M-502-05	
Benzidine 92-87-5	50	D	M-624-SS-01-10X			2,000	M	M-502-05-10X	
	2,000	D	M-625C-1		Bromomethane 74-83-9	200	M	M-502-06	
Benzo[a]pyrene 50-32-8	100	M-625C-1-40X				2,000	M	M-502-06-10X	
	500	CN	APP-9-020		1-Bromo-2-nitrobenzene 577-19-5	1,000	A	M-8081-IS-DC	
Benzo[b]fluoranthene 205-99-2	100	M	APP-9-017		4-Bromophenyl phenyl ether 101-55-3	100	M	APP-9-033	
	1,000	M	APP-9-017-10X		Bromophos-ethyl 4824-78-6	100	M	P-372S	
Benzo[g,h,i]perylene 191-24-2	100	D	APP-9-019			1,000	M	P-372S-10X	
	1,000	D	APP-9-019-10X		2-Bromopropanoic acid 598-72-1	1,000	MT	M-552.1-SS	
Benzo[k]fluoranthene 207-08-9	100	M	APP-9-018		Bromotrifluoromethane (Freon #13b1)	200	M	M-REF-01	
	500	CN	M-8310-FL-08		Bueno 2163-80-6	100	M	P-279S	
Benzoic acid 65-85-0	2,000	D	Z-014D-1		Butachlor 23184-66-9	100	M	P-191S	
Benzyl alcohol 100-51-6	100	M	APP-9-021			1,000	M	P-191S-10X	
	5,000	M	APP-9-021-50X		1,3-Butadiene 106-99-0	200	M	S-406A	
Benzyl benzoate 120-51-4	5,000	H	M-8061-IS			2,000	M	S-406A-10X	
Benzyl butyl phthalate 85-68-7	100	M	APP-9-034		Butanal 123-72-8	1,000	M	M-554-02 *	
Benzyl chloride 100-44-7	200	M	M-8010-01		Butanal-DNPH 1527-98-6	100	CN	M-8315-R-DNPH-05	
α-BHC 319-84-6	100	M	P-010S			1,000	M:CN	M-554-DNPH-02	
	1,000	M	P-010S-10X		1-Butanol 71-36-3	10,000	W	M-8015B/5031-06	
β-BHC 319-85-7	100	M	P-011S		t-Butanol 75-65-0	2,000	M	S-410	
	1,000	M	P-011S-10X			10,000	W	M-8015B/5031-07	
δ-BHC 319-86-8	100	M	P-012S		Butylate 2008-41-5	100	M	P-088S	
	1,000	M	P-012S-10X			1,000	M	P-088S-10X	
BHC Tech 608-73-1	100	M	P-081S		n-Butylbenzene 104-51-8	200	M	M-502-07	
Bifenox 42576-02-3	100	M	P-257S			2,000	M	M-502-07-10X	
Bifenthrin 82657-04-3	100	M	P-445S		sec-Butylbenzene 135-98-8	200	M	M-502-08	
	1,000	M	P-445S-10X			2,000	M	M-502-08-10X	
Bitertanol 55179-31-2	100	M	P-351S		tert-Butylbenzene 98-06-6	200	M	M-502-09	
Bloc 60168-88-9	100	M	P-086S			2,000	M	M-502-09-10X	
Bolstar 35400-43-2	100	M	P-108S		Captafol 2425-06-1	100	M	P-254S	
	1,000	H	M-8140-02		Captan 133-06-2	100	M	P-182S *	
Botran 99-30-9	100	M	P-013S		Carbaryl 63-25-2	100	M	P-083S	
Bromacil 314-40-9	100	M	P-181S			1,000	M	P-083S-10X	
Brominal 1689-84-5	100	M	P-256S		Carbazole 86-74-8	1,000	M	M-634-IS	
Bromoacetic acid 79-08-3	1,000	MT	M-552A-1		Carbendazim 10605-21-7	100	CN	M-631	
4-Bromoanisole 108-86-1	50	M	BAN-03			100	M	P-278S	
	200	M	M-502-02		Carbofuran 1563-66-2	100	CN	M-531-08	
Bromobenzene 108-86-1	2,000	M	M-502-02-10X			100	M	P-106S	
2-Bromobiphenyl 2052-07-5	1,000	A	M-8081-SS-X		Carbon disulfide 75-15-0	100	M	APP-9-035	
Bromochloroacetic acid 5589-96-8	40	MT	M-552.2A-01			2,000	M	APP-9-035-20X	
	1,000	MT	M-552A-R-02		Carbon tetrachloride 56-23-5	200	M	M-502-10	
Bromochloroacetone nitrile 83463-62-1	5,000	A	M-551B-1			2,000	M	M-502-10-10X	
2-Bromochlorobenzene 694-80-4	200	M	M-624-SS-12		Carbophenothion 786-19-6	100	M	P-095S	
4-Bromochlorobenzene 106-39-8	2,000	M	M-8020-SS-1			1,000	H	M-8141A-1-02	
					Carbosulfan 55285-14-8	100	M	P-446S	
					Carboxin 5234-68-4	100	M	P-216S	
					Chloral hydrate 302-17-0	5,000	A	M-551B-2	
						1,000	M	M-E-1179-M	

* ColdPAK required to maintain integrity of product.

Analytes in EPA Methods continued on next page



Analytes in EPA Methods

Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
Chloramben 133-90-4	100	M	P-243S		3-Chloro-1,2-propanediol 96-24-2	100	M	P-408S	
Chloramben methyl ester 7286-84-2	100	M	P-272S		Chloropropylate 5836-10-2	100	M	P-213S	
Chlorbenside 103-17-3	100	M	P-107S		2-Chloro-1,1,1,2-tetrafluoroethane (Freon #124)	200	M	M-REF-X-02	
α-Chlordane 5103-71-9	1,000	M	P-107S-10X		Chlorothalonil 1897-45-6	100	M	P-222S	
Chlordane 57-74-9	100	M	P-134S			1,000	M	P-222S-10X	
	100	H	P-134S-H		2-Chlorotoluene 95-49-8	200	M	M-502-15	
γ-Chlordane 5103-74-2	1,000	M	P-017S			2,000	M	M-502-15-10X	
	1,000	M	P-017S-10X		4-Chlorotoluene 106-43-4	200	M	M-502-16	
Chlordene 3734-48-3	100	M	P-135S			2,000	M	M-502-16-10X	
	100	M	P-135S-10X		Chlorotrifluoromethane (Freon #13)	200	M	M-REF-07	
Chlorfenvinphos 470-90-6	100	M	P-136S		Chlorpropham 101-21-3	100	CN	M-632-05	
	1,000	H	M-8141A-1-03		Chlorpyrifos 2921-88-2	1,000	H	M-8140-03	
Chlorfluorecol-methyl ester 2536-31-4	100	M	P-401S		Chlorpyrifos-methyl 5598-13-0	100	M	P-223S	
	100	M	P-401S-10X		Chlorsulfuron 64902-72-3	100	CN	P-262S-CN	
Chlorimuron-ethyl 90982-32-4	100	CN	P-284S-CN		Chrysene 218-01-9	100	M	APP-9-049	
bis(2-Chloro-1-methylethyl)ether 108-60-1	100	D	APP-9-028			500	CN	M-8310-FL-09	
Chloroacetic acid 79-11-8	1,000	MT	M-552A-2		Chrysene-d ₁₂ 1719-03-5	2,500	T	M-680B	
p-Chloroaniline 106-47-8	100	M	APP-9-038			4,000	D	Z-014J-2	
Chlorobenzene 108-90-7	200	M	M-502-11		Clethodim 99129-21-2	100	CN	P-602S-CN	
	2,000	M	M-502-11-10X		Clopyralid methyl ester 1532-24-7	1,000	CN	P-602S-CN-10X	
Chlorobenzilate 510-15-6	100	CN	P-133S-CN			100	M	P-488S	
	1,000	CN	P-133S-CN-10X		Coumaphos 56-72-4	100	M	P-019S	
Chlorodibromoacetic acid 5278-95-5	100	MT	M-552.2A-03			1,000	H	M-8140-04	
1-Chloro-1,1-difluoroethane (Freon #142b)	200	M	M-REF-02		4-CPA 122-88-3	100	M	P-373S	
Chlorodifluoromethane (Freon #22)	200	M	M-REF-03		m-Cresol 108-39-4	100	D	APP-9-050	
Chloroethane 75-00-3	200	M	M-502-12			1,000	D	APP-9-050-10X	
	2,000	M	M-502-12-10X		o-Cresol 108-39-4	100	D	APP-9-051	
Chloroethane (Freon #160)	200	M	M-REF-04			2,000	D	APP-9-051-20X	
bis(2-Chloroethoxy)methane 111-91-1	100	D	APP-9-026		p-Cresol 106-44-5	100	D	APP-9-052	
	1,000	M	APP-9-026-M-10X		Crotonaldehyde 123-73-9	1,000	M	M-554-03	
bis(2-Chloroethyl)ether 111-44-4	100	M	APP-9-027		Crotonaldehyde-DNPH 1527-96-4	100	CN	M-8315-R-DNPH-06	
	4,000	M	APP-9-027-40X			1,000	M:CN	M-554-DNPH-03	
2-Chloroethylvinyl ether 110-75-8	200	M	M-601C		Crufomate 299-86-5	100	M	P-292S	
	2,000	M	M-601C-10X			100	CN	M-629	
1-Chloro-2-fluorobenzene 348-51-6	2,000	M	S-163			100	M	P-175S	
1-Chloro-4-fluorobenzene 352-33-0	200	M	M-624-SS-13		Cyanazine 21725-46-2	100	M	P-248S	
Chloroform 67-66-3	200	M	M-502-13		Cycloate 1134-23-2	100	M		
	2,000	M	M-502-13-10X		Cyclohexanone 108-94-1	1,000	M	M-554-04	
1-Chlorohexane 544-10-5	200	M	M-8010R-1-04		Cyclohexanone-DNPH 1589-62-4	100	CN	M-8315-R-DNPH-07	
	2,000	M	M-8010R-1-04-10X		Cypermethrin 52315-07-8	100	M	P-225S	
Chloromethane 74-87-3	200	M	M-502-14			1,000	M	P-225S-10X	
	2,000	M	M-502-14-10X		Cyprazine 22936-86-3	100	M	P-420S	
bis(Chloromethyl)ether 542-88-1	100	H	S-006			100	H	P-420S-H	
	2,000	H	S-006-20X		Cyromazine 66215-27-8	100	M	P-296S	
4-Chloro-3-methylphenol 59-50-7	100	M	APP-9-041			100	M	P-020S	
2-Chloronaphthalene 91-58-7	100	M	APP-9-045		2,4-D 94-75-7	200	M	M-8150S-A-01	
	2,000	H	M-8120-01		2,6-D acid 575-90-6	100	M	P-690S	
4-Chloro-3-nitrobenzotrifluoride 121-17-5	1,000	A	M-8081-SS-DC			100	CN	P-690S-CN	
Chloropentafluoroethane 76-15-3	200	M	M-REF-06		2,4-D butoxyethyl ester 1929-73-3	10	mg	P-438N	
2-Chlorophenol 95-57-8	100	M	APP-9-046		2,4-D ethyl ester 533-23-3	100	M	P-636S	
	2,000	D	APP-9-046-D-20X		2,4-D ethylhexyl ester 1928-43-4	100	H	P-439S-H	
2-Chlorophenol-d ₄ 93951-73-6	200	D	M-625-20		2,4-D methyl ester 1928-38-7	100	M	P-021S	
4-Chlorophenyl phenyl ether 7005-72-3	100	M	APP-9-047			200	H	M-8150-01	
Chloropicrin 76-06-2	5,000	A	M-551B-3		Dacthal 1861-32-1	100	M	P-196S	
	100	M	P-398S		Dalapon acid 75-99-0	40	MT	M-552.2A-04	
Chloroprene 126-99-8	100	M	APP-9-048-R1			200	CN	M-8150S-A-05	
	1,000	M	APP-9-048-R1-10X						

Analytes in EPA Methods



Solvent Key for Individual Solutions

M Methanol D Methylene chloride H Hexane W Water
A Acetone CN Acetonitrile MT *tert*-Butyl methyl ether

Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
Dalapon methyl ester 17640-02-7	200 200	M H	M-552.1-01 M-8150-05		Dibromoacetic acid 631-64-1	20 1,000	MT MT	M-552.2A-05 M-552A-5	
Danitrol 39515-41-8	100 1,000	M M	P-263S P-263S-10X		Dibromoacetone 3252-43-5	5,000	A	M-551B-4	
Dasanit 115-90-2	100 1000	M H	P-235S P-235S-H-10X		4,4'-Dibromobiphenyl 92-86-4	200 2,000	D D	M-625-05 M-625-05-10X	
Dazomet 533-74-4	25 100	A M	M-1659-MS P-465S		Dibromochloromethane 124-48-1	200 2,000	M M	M-502-17 M-502-17-10X	
2,4-D-PFB	100	MT	M-8150-02-PFB		1,2-Dibromo-3-chloropropane 96-12-8	200 2,000	M M	M-502-18 M-502-18-10X	
2,4-DB acid 94-82-6	100 200	M M	P-141S M-8150S-A-02		1,2-Dibromoethane 106-93-4	200 2,000	M M	M-502-19 M-502-19-10X	
2,4-DB methyl ester 18625-12-2	100 200	M H	P-228S M-8150-02		Dibromofluoromethane 1868-53-7	200 2,000	M M	M-8260-SS-2 M-8260-SS-2-10X	
DCPA diacid 2136-79-0	100 100	M CN	P-320S P-320S-CN		Dibromomethane 74-95-3	200 2,000	M M	M-502-20 M-502-20-10X	
p,p'-DDA 83-05-6	100 1000	M M	P-444S P-444S-10X		a,a-Dibromo-m-xylene 626-15-3	1,000	A	M-8081-IS-X	
o,p'-DDD 53-19-0	100	M	P-024S		4,4'-Dibromo-octafluorobiphenyl 10386-84-2	200 2,000	D D	M-625-06 M-625-06-10X	
p,p'-DDD 72-54-8	100 1000	M M	P-025S P-025S-10X		1,2-Dibromopropane 78-75-1	5,000 10,000	M H	M-552-IS M-556-IS	
o,p'-DDE 3424-82-6	100	M	P-026S		2,3-Dibromopropionic acid 600-05-5	1,000 20,000	MT MT	M-552.2-SS M-552-SS	
p,p'-DDE 72-55-9	100 1000	M M	P-027S P-027S-10X		1,2-Dibromotetrafluoroethane 124-73-2	200	M	M-REF-X-03	
4,4'-DDMU 1022-22-6	100	M	P-424S		Dibutylchloride 1770-80-5	2 100	A M	M-1618-SS P-109S	
o,p'-DDT 789-02-6	100	M	P-028S		Dicamba 1918-00-9	100 200	M M	P-008S M-8150S-A-06	
p,p'-DDT 50-29-3	100	M	P-029S		Dicamba methyl ester 6597-78-0	100 200	M H	P-071S M-8150-06	
DDT, Tech 50-29-3	100 100	M CN	P-346S P-346S-CN		Dicapthon 2463-84-5	100 1,000	M M	P-035S P-035S-10X	
Decachlorobiphenyl 2051-24-3	200 500	A MT	CLP-032-R-01 M-508-SS-2		Dichlobenil 1194-65-6	100	M	P-275S	
Decafluorobiphenyl 434-90-2	200 2,000	D D	M-625-04 M-625-04-10X		Dichlofenthion 97-17-6	100	M	P-211S	
Decafluorotriphenylphosphine 5074-71-5	10 25	D D	M-680-TS M-625C-3		Dichlone 117-80-6	100	M	P-253S	
Decanal 112-31-2	1,000	M	M-554-05		Dichlormid 37764-25-3	100	M	P-675S	
Decanal-DNPH 1527-95-3	100 1,000	CN M:CN	M-8315-R-DNPH-08 M-554-DNPH-05		Dichloroacetic acid 79-43-6	60 1,000	MT MT	M-552.2A-06 M-552A-3	
Deet (Off®) 134-62-3	100	M	P-255S		Dichloroacetonitrile 3018-12-0	5,000	A	M-551B-5	
DEF 6 78-48-8	100	M	P-150S		1,2-Dichlorobenzene 95-50-1	200 2,000	M M	M-502-21 M-502-21-10X	
Deltamethrin 52918-63-5	100	M	P-355S		1,3-Dichlorobenzene 541-73-1	200 2,000	M M	M-502-22 M-502-22-10X	
Demeton-S 126-75-0	100	M	P-271S		1,4-Dichlorobenzene 106-46-7	200 2,000	M M	M-502-23 M-502-23-10X	
Demeton-S-methyl 919-86-8	100	M	P-482S		1,2-Dichlorobenzene-d ₄ 2199-69-1	200 2,000	M M	M-624-SS-11 M-624-SS-11-10X	
DFTPP 5074-71-5	50 100	A D	M-1653-TS M-525-TS		1,4-Dichlorobenzene-d ₄ 3855-82-1	2,000 4,000	M D	Z-014J-3-M-0.5X Z-014J-3	
DFTPPO	100	CN	M-553-PC		3,3'-Dichlorobenzidine 91-94-1	100 2,000	M M	APP-9-067 Z-014F-2	
Diallate 2303-16-4	100	M	P-142S		3,5-Dichlorobenzoic acid 51-36-5	100 1,000	M M	P-242S P-242S-10X	
2,6-Diamino-4-nitrotoluene 59229-75-3	100	CN	M-8330-ADD-13		4,4'-Dichlorobenzophenone 90-98-2	100 1,000	M M	P-295S P-295S-10X	
2,4-Diamino-6-nitrotoluene 6629-29-4	100	CN	M-8330-ADD-12		4,4'-Dichlorobiphenyl 2050-68-2	500	MT	M-508-SS	
Diazinon 333-41-5	100 1,000	M H	P-033S M-622-06		1,4-Dichlorobutane 110-56-5	200	M	M-624-SS-05	
Dibenz[a,h]anthracene 53-70-3	100 500	M CN	APP-9-058 M-8310-FL-10		trans-1,4-Dichloro-2-butene 110-57-6	100	M	APP-9-068	
Dibenzofuran 132-64-9	100	M	APP-9-059		Dichlorodifluoromethane 75-71-8	200 2,000	M M	M-502-24 M-502-24-10X	

* ColdPAK required to maintain integrity of product.

Analytes in EPA Methods continued on next page



Analytes in EPA Methods

Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
Dichlorodifluoromethane (Freon #12)	200	M	M-REF-08		1,1-Difluoroethane (Freon 152a)	200	M	M-REF-11	
1,1-Dichloroethane	200	M	M-502-25		Dimefox	100	M	P-299S	
75-34-3	2,000	M	M-502-25-10X		115-26-4				
1,2-Dichloroethane	200	M	M-502-26		Dimethoate	1,000	H:A	M-8141-01	
107-06-2	2,000	M	M-502-26-10X		60-51-5	1,000	M	P-039S-10X	
cis-1,2-Dichloroethene	200	M	M-502-28		Dimethyl phosphate	100	M	P-442S	
156-59-2	2,000	M	M-502-28-10X		813-78-5				
1,2-Dichloroethane-d ₄	200	M	M-624-SS-06		Dimethyl phthalate	100	M	APP-9-088	
17060-07-0	2,000	M	M-624-SS-06-10X		131-11-3	1,000	M	APP-9-088-10X	
1,1-Dichloroethene	200	M	M-502-27		2,3-Dimethyl-2,3-dinitrobutane (DMNB)	100	CN	M-8330-ADD-21	
75-35-4	2,000	M	M-502-27-10X		3964-18-9				
trans-1,2-Dichloroethene	200	M	M-502-29		1,3-Dimethyl-2-nitrobenzene	250	MT	M-507-SS	
156-60-5	2,000	M	M-502-29-10X		81-20-9	1,000	MT	M-507-SS-4X	
1,1-Dichloro-1-fluoroethane (Freon #141B)	200	M	M-REF-X-04		4-Dimethylaminoazobenzene	100	D	APP-9-083	
Dichlorofluoromethane	200	M	M-502-61		60-11-7				
75-43-4	2,000	M	M-502-61-10X		7,12-Dimethylbenz[a]anthracene	100	D	APP-9-084	
Dichlorofluoromethane (Freon #21)	200	M	M-REF-09		57-97-6				
Dichloromethane	200	M	M-502-39		2,5-Dimethylbenzaldehyde-DNPH	100	CN	M-8315-R-DNPH-09	
75-09-2	2,000	M	M-502-39-10X		152477-96-8				
Dichlorophen	100	M	P-232S		3,3'-Dimethylbenzidine	100	D	APP-9-085	
97-23-4					119-93-7				
2,4-Dichlorophenol	1,000	MT	M-552A-6		a,a-Dimethylphenethylamine	100	D	APP-9-086	
120-83-2	1,000	M	M-8040-07		122-09-8	100	D	APP-9-086-20X	
2,6-Dichlorophenol	100	D	APP-9-076		2,4-Dimethylphenol	100	M	APP-9-087	
87-65-0	1,000	M	M-8040-08		105-67-9	1,000	M	M-8040-09	
2,3-Dichlorophenoxyacetic acid	100	M	P-470S		Di-n-butyl phthalate	100	M	APP-9-063	
2976-74-1	100	CN	P-470S-CN		84-74-2	1,000	M	APP-9-063-10X	
2,4-Dichlorophenylacetic acid	100	A	M-8150B-SS		Dinex	100	M	P-427S	
19719-28-9	1,000	A	M-8150B-SS-10X		131-89-5	1,000	M	P-427S-10X	
1,2-Dichloropropane	200	M	M-502-30		3,5-Dinitroaniline	100	CN:M	M-8330-ADD-4	
78-87-5	2,000	M	M-502-30-10X		618-87-1				
1,3-Dichloropropane	200	M	M-502-31		1,2-Dinitrobenzene	1,000	M	M-8330-SS	
142-28-9	2,000	M	M-502-31-10X		528-29-0				
2,2-Dichloropropane	200	M	M-502-32		1,3-Dinitrobenzene	100	M:C:N	M-8330-01-0.1X	
594-20-7	2,000	M	M-502-32-10X		99-65-0	1,000	M:C:N	M-8330-01	
1,1-Dichloro-2-propanone	5,000	A	M-551B-6		4,6-Dinitro-o-cresol	100	M	P-384S	
513-88-2					534-52-1	1,000	M	P-384S-10X	
1,1-Dichloropropene	200	M	M-502-33		2,4-Dinitrophenol	100	M	APP-9-091	
563-58-6	2,000	M	M-502-33-10X		51-28-5	1,000	M	M-8040-10	
trans-1,3-Dichloropropene	100	M	APP-9-079		2,4-Dinitrophenylhydrazine	1,000	CN	M-1667A-DERIV-10ML in 10 mL	
10061-02-6					119-26-6				
1,3-Dichloropropene (cis/trans)	400	M	M-502-34-R		2,4-Dinitrotoluene	100	M:C:N	M-8330-02-0.1X	
542-75-6	4,000	M	M-502-34-R-10X		121-14-2	1,000	M:C:N	M-8330-02	
cis-1,3-Dichloropropene	100	M	APP-9-078		2,5-Dinitrotoluene	100	CN	M-8095-SS-03	
10061-01-5					619-15-8				
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon #114)	200	M	M-REF-10		2,6-Dinitrotoluene	100	M:C:N	M-8330-03-0.1X	
2,2-Dichloro-1,1,1-trifluoroethane (Freon #123)	200	M	M-REF-X-05		606-20-2	1,000	M:C:N	M-8330-03	
Dichlorprop	100	M	P-143S		3,4-Dinitrotoluene	100	CN	M-8095-SS-01	
120-36-5	200	M	M-8150S-A-07		610-39-9	1,000	M	M-8330-IS	
Dichlorprop methyl ester	100	M	P-229S		Dinocap	100	M	P-288S	
57153-17-0	200	H	M-8150-07		39300-45-3				
Dichlorvos	100	M	P-036S		Di-n-octyl phthalate	100	M	APP-9-095	
62-73-7	1,000	H	M-8140-07		117-84-0				
Diclofop methyl	100	M	P-303S		Dinoseb	100	M	P-144S	
51338-27-3					88-85-7	1,000	M	M-8040-11	
Dicrotophos	100	M	P-178S		Dinoseb methyl ether	100	M	P-230S	
141-66-2					6099-79-2	200	H	M-8150-08	
Dieldrin	100	M	P-037S		Dioxacarb	100	M	M-8318-05	
60-57-1	1,000	M	P-037S-10X		6988-21-2				
Diethyl ether	10,000	W	M-8015B/5031-09		p-Dioxane	100	M	APP-9-096	
60-29-7					123-91-1	1,000	M	APP-9-096-10X	
Diethyl phosphate (mono- & di-)	100	M	P-443S		Dioxathion	100	M	P-219S	
598-02-7					78-34-2	1,000	H	M-8141A-1-04	
Diethyl phthalate	100	M	APP-9-081		Diphenamid	100	M	P-173S	
84-66-2	1,000	M	APP-9-081-10X		957-51-7				
1,4-Difluorobenzene	200	M	M-624-SS-07		Diphenylamine	100	D	APP-9-097	
540-36-3	2,000	M	M-624-SS-07-10X		122-39-4	1,000	M	M-620	
2,2'-Difluorobiphenyl	200	D	M-625-07		Diquat dibromide monohydrate (as Diquat)	100	M	P-231S	
388-82-9	2,000	D	M-625-07-10X		Disulfoton	1,000	M	P-231S-10X	
4,4'-Difluorobiphenyl	100	CN	M-550-IS		298-04-4	100	M	P-042S	
398-23-2					Disulfoton sulfone	1,000	H	M-8140-08	
					2497-06-5	100	M	P-582S	
					2,4-DP ethyl hexyl	100	M	P-429S	
					79270-78-3				

Analytes in EPA Methods



Solvent Key for Individual Solutions

M Methanol **D** Methylene chloride **H** Hexane **W** Water
A Acetone **CN** Acetonitrile **MT** *tert*-Butyl methyl ether

Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
Dursban	100	M	P-094S		Fenthion	100	M	P-148S	
2921-88-2	1,000	M	P-094S-10X		55-38-9	1,000	H	M-8140-11	
Dyfonate	100	M	P-087S		Fenuron	100	M	P-004S	
944-22-9	100	H	P-087S-H		101-42-8	100	CN	M-632-07	
EGDN	100	CN	M-8330-ADD-5		Fenuron TCA	100	M	P-006S	
628-96-6					4482-55-7	100	CN	M-632-08	
Endosulfan I	100	M	P-091S		Fenvalerate *	100	M	P-194S	
959-98-8	10	MT	M-548-IS		51630-58-1				
Endosulfan II	100	M	P-092S		Ferbam	100	M	P-110S	
33213-65-9	1,000	M	P-092S-10X		14484-64-1				
Endosulfan sulfate	100	M	P-145S		Fipronil	100	A	P-738S-A	
1031-07-8	1,000	M	P-145S-10X		120068-37-3	100	M	P-738S	
Endothall	100	M	P-183S		Fipronil sulfide	100	A	P-781S-A	
145-73-3	1,000	M	P-183S-10X		120067-83-6				
Endothall dimethyl ester	100	M	M-548.1-ME		Fipronil sulfone	100	A	P-780S-A	
					120068-36-2				
Endothall pentafluorophenyl hydrazine derivative	100	MT	M-548-CAL		Flamprop-methyl	100	M	P-366S	
Endrin	100	M	P-045S		52756-25-9				
72-20-8	1,000	M	P-045S-10X		Fluazifop butyl	100	M	P-310S	
Endrin aldehyde	100	M	P-046S		69806-50-4				
7421-93-4	1,000	M	P-046S-10X		Fluazifop-p-butyl	100	M	P-601S	
Endrin ketone	100	M	P-146S		79241-46-6				
53494-70-5					Fluchloralin	100	M	P-270S	
EPN	100	A	P-220S-A		33245-39-5				
2104-64-5	1,000	H	M-8141-02		Fluometuron	100	M	P-014S	
Ethalfuralin	100	M	P-269S		2164-17-2	100	CN	M-632-09	
55283-68-6					Fluoranthene	100	M	APP-9-108	
Ethanol	10,000	W	M-8015B/5031-11		206-44-0	500	CN	M-8310-FL-11	
64-17-5					Fluorene	100	M	APP-9-109	
Ethephon	100	M	P-239S		86-73-7	500	M	M-8310-FL-12	
16672-87-0					4-Fluoroaniline	200	D	M-625-08	
Ethion	100	M	P-048S		371-40-4	2,000	D	M-625-08-10X	
563-12-2	1,000	H	M-8141A-1-05		Fluorobenzene	20	M	M-524-IS-2-10X	
Ethoprop	100	M	P-129S		462-06-6	2,000	M	M-524-IS-2	
13194-48-4	1,000	H	M-8140-09		2-Fluorobiphenyl	200	D	M-625-09	
Ethyl acetate	10,000	W	M-8015B/5031-12		321-60-8	2,000	D	M-625-09-10X	
141-78-6					1-Fluoronaphthalene	200	D	M-625-10	
Ethyl carbamate	100	M	P-419S		321-38-0	2,000	D	M-625-10-10X	
51-79-6					2-Fluoronaphthalene	200	D	M-625-11	
Ethyl methacrylate	100	M	APP-9-105		323-09-1				
97-63-2					2-Fluorophenol	200	D	M-625-16	
Ethyl methanesulfonate	100	D	APP-9-106		367-12-4	2,000	D	M-625-16-10X	
62-50-0					Flurenol methyl ester	100	M	P-412S	
Ethylbenzene	200	M	M-502-35		1216-44-0				
100-41-4	2,000	M	M-502-35-10X		Fluridone	100	M	P-193S	
Ethylbenzene-d₁₀	200	M	M-624-SS-08		59756-60-4				
25837-05-2					Tau-Fluvalinate	100	CN	P-356S-CN	
Ethylene glycol	10,000	W	M-8015B/5031-13		102851-06-9				
107-21-1					Folpet	100	M	P-258S	
Ethylene oxide *	5,000	W	M-8015B/5031-14-R1		133-07-3				
75-21-8					Formaldehyde	1,000	W	M-8315-02	
bis(2-Ethylhexyl)adipate	100	M	P-233S		50-00-0	1,000	M	M-554-06 *	
103-23-1	1,000	M	P-233S-10X		Formaldehyde-DNPH	100	CN	M-8315-R-DNPH-10	
bis(2-Ethylhexyl)phthalate	100	M	APP-9-029		1081-15-8	1,000	M:CN	M-554-DNPH-06	
117-81-7	1,000	M	APP-9-029-10X		Formothion	100	CN	P-149S-CN	
Famphur	100	M	P-147S		2540-82-1				
52-85-7	1,000	H	M-8141A-1-06		Glyphosate	100	W	M-547	
Fenaminosulf	100	M	P-058S		1071-83-6	1,000	W	P-015S-W-10X	
140-56-7	1,000	M	P-058S-10X		Guanidine nitrate	100	M	M-8330-ADD-10	
Fenamiphos	100	M	P-114S		506-93-7				
22224-92-6					Haloxifop	100	M	P-496S	
Fenitrothion	100	M	P-259S		69806-34-4	100	CN	P-496S-CN	
122-14-5					Haloxifop-methyl	100	M	P-497S	
Fenoxaprop-ethyl	100	M	P-365S		69806-40-2				
66441-23-4					Heptachlor	100	M	P-053S	
Fenoxycarb	100	M	P-686S		76-44-8	1,000	M	P-053S-10X	
79127-80-3					Heptachlor epoxide (Isomer A)	100	M	P-294S	
Fensulfthion	1,000	H	M-8140-10		28044-83-9				
115-90-2					Heptachlor epoxide (Isomer B)	100	M	P-054S	
					1024-57-3	1,000	M	P-054S-10X	

* ColdPAK required to maintain integrity of product.

Analytes in EPA Methods continued on next page



Analytes in EPA Methods

Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
Heptanal 111-71-7	1,000	M	M-554-07		Linuron 330-55-2	100	M	P-022S	
Heptanal-DNPH 2074-05-7	100	CN	M-8315-R-DNPH-11		Lontrel 1702-17-6	100	CN	M-632-10	
Hexachlorobenzene 118-74-1	1,000	M:CN	M-554-DNPH-07		Malathion 121-75-5	100	M	P-224S	
Hexachlorobutadiene 87-68-3	2,000	A	M-8091-IS-20X		MCPA acid 94-74-6	1,000	H	M-8141-03	
Hexachlorocyclopentadiene 77-47-4	200	M	M-8120-05		MCPA methyl ester 2436-73-9	100	M	P-153S	
Hexachloroethane 67-72-1	2,000	M	M-502-36		MCPB acid 94-81-5	2,000	M	M-8150S-A-09	
Hexachlorophene 70-30-4	100	M	M-502-36-10X		MCPB methyl ester 57153-18-1	100	M	P-038S	
Hexachloropropene 1888-71-7	2,000	H	APP-9-114		MCPP acid 7085-19-0	2,000	H	M-8150-09	
Hexanal 66-25-1	100	M	M-8120-07		MCPB methyl ester 57153-18-1	100	M	P-370S	
Hexanal-DNPH 1527-97-5	100	M	APP-9-115		MCPP acid 7085-19-0	100	M	P-371S	
2-Hexanone 591-78-6	2,000	D	M-8120-08		MCPB methyl ester 57153-18-1	100	M	P-371S	
Hexazinone 51235-04-2	100	M	APP-9-116		MCPP acid 7085-19-0	100	CN	P-154S-CN	
HMX 2691-41-0	1,000	M	M-554-08 *		MCPB methyl ester 57153-18-1	2,000	M	M-8150S-A-10	
Hydrazine 302-01-2	100	M:CN	M-8315-R-DNPH-12		MCPB methyl ester 57153-18-1	100	M	P-040S	
2-Hydroxyatrazine 2163-68-0	1,000	M	M-554-DNPH-08		MCPB methyl ester 57153-18-1	2,000	H	M-8150-10	
3-Hydroxycarbofuran 16655-82-6	100	M	APP-9-118 *		Mecoprop, 2-Ethylhexyl ester 71526-69-7	100	M	P-502S	
1-Hydroxychlorodene 24009-05-0	100	M	APP-9-118 *		Mercaptobenzothiazole 149-30-4	100	CN	M-640	
Imidan 732-11-6	100	M	P-123S		Merphos 150-50-5	1,000	H	M-8140-12	
Indeno[1,2,3-cd]pyrene 193-39-5	1,000	M	P-123S-10X		Metalaxyl 57837-19-1	100	M	P-120S	
Iodofenphos 18181-70-9	100	M:CN	M-8330-04-0.1X		Metaldehyde 9002-91-9	100	M	P-600S	
Ioxynil 1689-83-4	100	M	M-8330-04		Metamitron 41394-05-2	100	CN	P-600S-CN	
Iprodione 36734-19-7	100	M	M-8330-ADD-8		Metazachlor 67129-08-2	100	M	P-252S	
Isobutyl alcohol 78-83-1	100	M:A	P-326S		Methacrylonitrile 126-98-7	100	M	P-249S	
Isodrin 465-73-6	100	M	M-531-05		Methanol 67-56-1	100	M	APP-9-125	
Isofenphos 25311-71-1	100	CN	M-531-05		Methaprylene 91-80-5	10,000	W	M-8015B/5031-17	
Isophorone 78-59-1	100	M	M-8318-06		Methidathion 950-37-8	100	D	APP-9-126	
Isopropalin 33820-53-0	500	CN	M-8310-FL-13		Methiocabr 2032-65-7	1,000	D	APP-9-126-10X	
Isopropanol 67-63-0	100	M	P-379S		Methomyl 16752-77-5	100	M	P-195S	
Isopropylbenzene 98-82-8	100	M	P-522S		Methoprene 40596-69-8	100	M	M-8318-07	
p-Isopropyltoluene (p-Cymene) 99-87-6	100	A	P-016S-A		Methoxychlor 72-43-5	100	CN	M-531-11	
Isosafrole 120-58-1	100	CN	P-016S-CN		o,p'-Methoxychlor 30667-99-3	100	CN	M-531-04	
Isovaleraldehyde-DNPH 2256-01-1	100	M	APP-9-120		p,p'-Methoxychlor-olefin 2132-70-9	1,000	CN	M-531-04-10X	
Karmex 330-54-1	10,000	W	M-8015B/5031-15		Methyl-2,3-dibromopropionate 1729-67-5	100	MT	M-552.2-SS-ME	
Kelthane 115-32-2	1,000	M	APP-9-121-10X		Methyl bromoacetate 96-32-2	100	M	M-552.1-02	
Kepone 143-50-0	100	M	P-018S		Methyl bromochloroacetate 20428-74-4	200	M	M-552.1-03	
3-Ketocarbofuran 16709-30-1	200	M	M-502-37		Methyl bromodichloroacetate 40	1,000	MT	M-552-R-03	
Leptophos 21609-90-5	2,000	M	M-502-37-10X		Methyl 2-bromopropionate 5445-17-0	200	M	M-552.2-04	
Lindane (γ-BHC) 58-89-9	200	M	M-502-38		Methyl chlorodibromoacetate 20428-75-5	1,000	MT	M-552.1-SS-ME	
	2,000	M	M-502-38-10X		3-Methylcholanthrene 56-49-5	100	MT	M-552.2-07	
	100	D	APP-9-123		Methyl dibromoacetate 6482-26-4	100	D	APP-9-128	
	100	CN	M-8315-R-DNPH-13		Methyl dichloroacetate 116-54-1	20	MT	M-552.2-08	
	100	M	P-227S		Methyl 3,5-dichlorobenzoate 2905-67-1	100	M	M-552.1-05	
	100	CN	M-632-06		Methyl 2,4-Dichlorophenylacetate 55954-23-9	60	MT	M-552.2-06	
	100	M	P-057S		Methylene chloride-d ₂ 1665-00-5	300	M	M-552.1-06	
	100	M	P-152S			100	M	P-247S	
	1,000	M	P-152S-10X			1,000	M	P-247S-10X	
	100	A	P-298S-A			100	M	P-214S	
	100	M	P-206S						
	1,000	H	M-8141A-1-07						
	100	M	P-059S						
	1,000	M	P-059S-10X						

* ColdPAK required to maintain integrity of product.

Analytes in EPA Methods



Solvent Key for Individual Solutions

M Methanol **D** Methylene chloride **H** Hexane **W** Water
A Acetone **CN** Acetonitrile **MT** *tert*-Butyl methyl ether

Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
Methyl ethyl ketone 78-93-3	1,000 10,000	M W	APP-9-129-10X * M-8015B/5031-18		1-Naphthalene acetamide 86-86-2	100	M	P-512S	
Methyl iodide 74-88-4	100	M	APP-9-130		Naphthalene-d ₈ 1146-65-2	200 4,000	D D	M-625-12 Z-014J-4	
Methyl isobutyl ketone 108-10-1	10,000	W	M-8015B/5031-19		1-Naphthol 90-15-3	100	CN	M-531-10	
Methyl isothiocyanate 556-61-6	25	A	M-1659-RPS		1,4-Naphthoquinone 130-15-4	100	D	APP-9-137	
Methyl methacrylate 80-62-6	100	M	APP-9-131		1-Naphthylamine 134-32-7	100	D	APP-9-138	
Methyl methanesulfonate 66-27-3	100	D	APP-9-132		2-Naphthylamine 91-59-8	100	D	APP-9-139	
1-Methylnaphthalene 90-12-0	500	CN	M-8310-FL-14		Napropamide 15299-99-7	100 100	M CN	P-179S M-632-1-3	
2-Methylnaphthalene 91-57-6	100 500	D CN	APP-9-133 M-8310-FL-15		Neburon 555-37-3	100 100	M CN	P-041S M-632-16	
2-Methyl-4-nitroaniline 99-52-5	100	CN	M-8095-SS-02		Niclosamide 50-65-7	100	M	P-160S	
3-Methyl-4-nitrophenol 2581-34-2	100	M	P-509S		m-Nitroaniline 99-09-2	100	D	APP-9-141	
Methyl nonyl ketone 112-12-9	100 100	M CN	P-415S P-415S-CN		o-Nitroaniline 88-74-4	100	D	APP-9-140	
Methyl paraoxon 298-00-0	100	M	P-311S		p-Nitroaniline 100-01-6	100	D	APP-9-142	
Methyl parathion 298-00-0	100 1,000	M H	P-065S M-8140-13		4-Nitroanisole 100-17-4	100	M	P-273S	
4-Methyl-2-pentanone 108-10-1	100	M	APP-9-135		Nitrobenzene 98-95-3	100 1,000	M:CN M:CN	M-8330-06-0.1X M-8330-06	
Methyl tribromoacetate 3222-05-7	200	MT	M-552.2-09 *		Nitrobenzene-d ₅ 4165-60-0	200 2000	D D	M-625-13 M-625-13-10X	
Methyl trichloroacetate 598-99-2	100 200	M MT	M-552.1-07 M-552.2-10		Nitroguanidine 556-88-7	100	M	M-8330-ADD-6	
Metolachlor 51218-45-2	100 1,000	M M	P-158S P-158S-10X		Nitromethane 75-52-5	100	M	M-8330-ADD-7	
Metribuzin 21087-64-9	100 1,000	M M	P-089S P-089S-10X		5-Nitro-o-toluidine 99-55-8	100	D	APP-9-156	
Metsulfuron methyl 74223-64-6	100	M	P-463S		o-Nitrophenol 88-75-5	100	M	APP-9-144	
Mevinphos 7786-34-7	100 1,000	M H	P-074S M-8140-14		p-Nitrophenol 100-02-7	100	M	APP-9-145	
Mexacarbate 315-18-4	100 100	M CN	P-030S M-632-13		4-Nitroquinoline-1-oxide 56-57-5	100	D	APP-9-146	
MGK-264 113-48-4	100	M	P-082S		N-Nitrosodiethylamine 55-18-5	100	D	APP-9-148	
MGK-326 136-45-8	100	M	P-342S		N-Nitrosodimethylamine 62-75-9	100 1,000	D M	APP-9-149 APP-9-149-M-10X	
Mirex 2385-85-5	100	M	P-066S		N-Nitrosodi-n-butylamine 924-16-3	100 500	D W	APP-9-147 M-8015B/5031-20	
Molinate 2212-67-1	100	M	P-176S		N-Nitrosodi-n-propylamine 621-64-7	100	D	APP-9-151	
Monitor 10265-92-6	100	M	P-155S		N-Nitrosodiphenylamine 86-30-6	100 1,000	D M	APP-9-150 APP-9-150-M-10X	
Monobromoacetic acid 79-08-3	40	MT	M-552.2A-07		N-Nitrosomethylethylamine 10595-95-6	100	D	APP-9-152	
Monochloroacetic acid 79-11-8	60	MT	M-552.2A-08		N-Nitrosomorpholine 59-89-2	100	D	APP-9-153	
Monocrotophos 6923-22-4	100 1,000	M H	P-112S M-8141-04		N-Nitrosopiperidine 100-75-4	100	D	APP-9-154	
Monuron 150-68-5	100	CN	M-632-14		N-Nitrosopyrrolidine 930-55-2	100	D	APP-9-155	
Monuron TCA 140-41-0	100 100	M CN	P-034S M-632-15		2-Nitrotoluene 88-72-2	100 1,000	M:CN M:CN	M-8330-07-0.1X M-8330-07	
MtBE 1634-04-4	2,000	M	M-8020-QC		3-Nitrotoluene 99-08-1	100 1,000	M:CN M:CN	M-8330-08-0.1X M-8330-08	
Myclobutanil 88671-89-0	100 1,000	M M	P-330S P-330S-10X		4-Nitrotoluene 99-99-0	100 1,000	M:CN M:CN	M-8330-09-0.1X M-8330-09	
Nabam 142-59-6	100	M	P-383S		cis-Nonachlor 5103-73-1	100 1,000	M M	P-297S P-297S-10X	
Naled 300-76-5	100 1,000	M H	P-159S M-8140-15		trans-Nonachlor 39765-80-5	100	M	P-184S	
Naphthalene 91-20-3	200 500	M M	M-502-40 M-8310-FL-16						

Analytes in EPA Methods continued on next page



Analytes in EPA Methods

Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
Nonanal 124-19-6	1,000	M	M-554-09		o-Phenylphenol 90-43-7	100	M	P-460S	
Nonanal-DNPH 2348-19-8	100	CN	M-8315-R-DNPH-14		Phorate 298-02-2	100	M	P-170S	
Octanal 124-13-0	1,000	M	M-554-10		Phorate sulfone 2588-04-7	1,000	H	M-8140-16	
Octanal-DNPH 1726-77-8	100	CN	M-8315-R-DNPH-15		Phosalone 2310-17-0	100	H	P-655S-H	
Omethoate 1113-02-6	1,000	M:CN	M-554-DNPH-10		Phosfolan 947-02-4	100	M	P-163S	
Oryzalin 19044-88-3	100	M	P-121S		Phosfolan 947-02-4	1,000	M	P-234S	
Oxadiazon 19666-30-9	1,000	M	P-121S-10X		Phosphamidon 13171-21-6	100	M	P-234S-10X	
Oxamyl 23135-22-0	100	CN	M-638		Picloram 1918-02-1	100	M	P-075S	
Oxycarboxin 5259-88-1	100	M	P-236S		Picloram methyl ester 14143-55-6	1,000	H	M-8141A-1-09	
Oxychlorodane Isomer 27304-13-8	1,000	M	P-236S-10X		2-Picoline 109-06-8	100	M	P-047S	
Oxydemeton-methyl 301-12-2	100	M	P-161S		Picramic acid 831-52-7	100	CN	M-644	
Oxyfluorfen 42874-03-3	100	CN	M-531-03		Picramic acid 831-52-7	100	M	P-198S	
Paraldehyde 123-63-7	100	M	P-391S		Picric acid 88-89-1	100	M	APP-9-182	
Paraoxon 311-45-5	100	M	P-331S		Picric acid 88-89-1	10,000	W	M-8015B/5031-23	
Paraquat CL tetrahydrate 1910-42-5 (as Paraquat)	100	H	P-331S-H		Pirimicarb 23103-98-2	100	M	M-8330-ADD-22	
Parathion 56-38-2	1,000	M	P-290S		Pirimiphos-methyl 29232-93-7	100	CN:M	M-8330-ADD-3	
Pendimethalin 40487-42-1	100	M	P-277S		Prebane 886-50-0	100	M	P-304S	
Pentachloroanisole 1825-21-4	10,000	W	M-8015B/5031-21		Profenofos 41198-08-7	100	M	P-305S	
Pentachlorobenzene 608-93-5	100	M	P-453S		Profluralin 26399-36-0	100	M	P-119S	
Pentachloroethane 76-01-7	1,000	M	P-453S-10X		Promecarb 2631-37-0	100	M	P-260S	
Pentachloronitrobenzene 82-68-8	100	M	P-051S		Prometon 1610-18-0	100	M	P-099S	
Pentachlorophenol 87-86-5	100	M	P-070S		Prometryne 7287-19-6	1,000	M	P-099S-10X	
Pentafluorobenzene 363-72-4	1,000	H	M-622-19		Pronamide 23950-58-5	100	M	M-8318-09	
Pentafluoroethane (Freon #125)	100	M	P-097S		Propachlor 1918-16-7	100	M	M-619-04	
Pentafluorophenol 771-61-9	1,000	M	P-097S-10X		Propanal 123-38-6	100	M	M-619-05	
Pentanal 110-62-3	200	M	M-624-SS-10		Propanal-DNPH 725-00-8	100	M	P-164S	
Pentanal-DNPH 2057-84-3	200	M	M-REF-X-06		Propanil 709-98-8	100	M	P-215S	
2-Pentanone 107-87-9	200	D	M-625-17		1-Propanol 71-23-8	1,000	M	P-215S-10X	
Permethrin 52645-53-1	1,000	M	M-554-11		Propargite 2312-35-8	1,000	M	M-554-12 *	
Perthane 72-56-0	100	M	M-508-IS		Propazine 139-40-2	100	CN	M-8315-R-DNPH-17	
PETN 78-11-5	1,000	MT	M-508-IS-10X		Propham 122-42-9	1,000	M:CN	M-554-DNPH-12	
Phenacetin 62-44-2	100	M	M-625-C-2		Propionitrile 107-12-0	100	CN	M-632.1-2	
Phenanthrene 85-01-8	100	M	M-8040-15		n-Propylbenzene 103-65-1	10,000	W	M-8015B/5031-24	
Phenanthrene-d ₁₀ 1517-22-2	200	M	M-624-SS-10		Propyleneglycol dinitrate 6423-43-4	100	M	P-251S	
Phenol 108-95-2	100	D	M-625-14		Pyradon 1698-60-8	100	M	M-619-06	
Phenol-d ₆ 4165-62-2	1,000	M	M-625-18		Pyrazoxifen 71561-11-0	100	M	M-632-18	
Phenthioate 2597-03-7	2,000	D	M-625-18-10X		Pyrene 129-00-0	100	M	APP-9-184	
p-Phenylenediamine 106-50-3	100	M	P-476S		Pyrene-d ₁₀ 1718-52-1	10,000	W	M-8015B/5031-25	
					Pyridine 110-86-1	200	M	M-502-41	
					Pyridine-d ₅ 7291-22-7	2,000	M	M-502-41-10X	
					PYX 38082-89-2	100	M	M-8330-ADD-35	

Analytes in EPA Methods



Solvent Key for Individual Solutions

M Methanol D Methylene chloride H Hexane W Water
A Acetone CN Acetonitrile MT *tert*-Butyl methyl ether

Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
Quizalofop ethyl 76578-14-8	100	CN	P-293S-CN		1,1,2,2-Tetrachloroethane 79-34-5	200 2,000	M M	M-502-44 M-502-44-10X	
RDX 121-82-4	100 1,000	M:CN M:CN	M-8330-05-0.1X M-8330-05		Tetrachloroethene 127-18-4	200 2,000	M M	M-502-45 M-502-45-10X	
Ronnel 299-84-3	100 1,000	M H	P-080S M-8140-17		2,3,5,6-Tetrachloronitrobenzene 117-18-0	100	M	P-467S	
Rotenone 83-79-4	100 100	M CN	P-056S * M-635		2,3,4,6-Tetrachlorophenol 58-90-2	100 1,000	M M	APP-9-195 M-8040-17	
Safrole 94-59-7	100	M	APP-9-187		Tetrachlorvinphos 961-11-5	100 1,000	M CN	P-125S AE-00047	
Secbumeton 26259-45-0	100	M	M-619-07		Tetradifon 116-29-0	100	M	P-261S	
Siduron 1982-49-6	100 100	M CN	P-063S M-632-20		Tetrafluoroethane 811-97-2	200	M	M-REF-12	
Silvex 93-72-1	100 1,000	M M	P-084S P-084S-10X		1,1,2,2-Tetrafluoroethane (Freon #134)	200	M	M-REF-X-07	
Silvex methyl ester 4841-20-7	100	M	P-115S		Tetrahydrofuran 109-99-9	1,000	W	M-1671A-IS	
Simazine 122-34-9	100 1,000	M M	P-085S M-507F		Tetryl 479-45-8	100 1,000	M:CN M:CN	M-8330-10-0.1X M-8330-10	
Simetryn 1014-70-6	100	M	M-619-08		Thiabendazole 148-79-8	100 100	M CN	P-068S M-641	
Stiropfos 961-11-5	1,000	H	M-8140-18		Thiobencarb 28249-77-6	100 1,000	M M	P-180S P-180S-10X	
Styrene 100-42-5	200 2,000	M M	M-502-42 M-502-42-10X		4,4'-Thiodiphenol 2664-63-3	100 1,000	M M	P-117S P-117S-10X	
Sulfotep 3689-24-5	100 1,000	M H	P-167S M-8141-06		Thiofanox 39196-18-4	100	M	P-266S	
Sulfoxide 120-62-7	100	M	P-396S		Thionazin 297-97-2	100	M	P-171S	
Sumithrin 26002-80-2	100	M	P-050S		Thiophanate 23564-06-9	100 100	M CN	P-321S P-321S-CN	
Sweep 1918-18-9	100 100	M CN	P-061S M-632-21		Thiram 137-26-8	100 1,000	M M	P-118S P-118S-10X	
2,4,6-T 575-89-3	100 100	M CN	P-523S P-523S-CN		Tillam 1114-71-2	100 1,000	M M	P-105S P-105S-10X	
2,4,5-T acid 93-76-5	100 1,000	M M	P-168S P-168S-10X		Tilt 60207-90-1	100	M	P-280S	
2,4,5-T butoxyethyl ester 2545-59-7	100	CN	P-441S-CN		TNT 118-96-7	100 1,000	M:CN M:CN	M-8330-11-0.1X M-8330-11	
2,4,5-T methyl ester 1928-37-6	100 200	M H	P-067S M-8150-03		Tokuthion 34643-46-4	100 1,000	M H	P-126S M-8140-19	
2,4,5-T n-butyl ester 93-79-8	100	CN	P-440S-CN		m-Tolualdehyde-DNPH 2880-05-9	100	CN	M-8315-R-DNPH-18	
TAME 994-05-8	200	M	S-1019		o-Tolualdehyde-DNPH 1773-44-0	100	CN	M-8315-R-DNPH-19	
TCMX 877-09-8	100 1,000	H H	M-8082-SS M-8082-SS-10X		p-Tolualdehyde-DNPH 2571-00-8	100	CN	M-8315-R-DNPH-20	
Tebuconazol 107534-96-3	100	M	P-451S		Toluene 108-88-3	200 2,000	M M	M-502-46 M-502-46-10X	
Tebuthiuron 34014-18-1	100	M	P-188S		o-Toluidine 95-53-4	100 10,000	M W	APP-9-199 M-8015B/5031-27	
Tefluthrin 79538-32-2	100	M	P-568S *		Toxaphene 8001-35-2	1,000 2,500	M A	P-093S-10X M-525-5	
TEPP 107-49-3	1,000	H	M-8141-07		2,4,5-TP 93-72-1	200	M	M-8150S-A-04	
Terbacil 5902-51-2	100	M	P-096S		2,4,5-TP methyl ester 4841-20-7	200	H	M-8150-04	
Terbufos 13071-79-9	100 1,000	M H	P-208S M-8141A-1-10		2,4,5-TP-PFB 4841-20-7	100	MT	M-8150-04-PFB	
Terbutylazine 5915-41-3	100	M	M-619-10		Triadimefon 43121-43-3	100	M	P-069S	
p-Terphenyl-d ₁₄ 1718-51-0	500	D	M-525-FS-2		Triallate 2303-17-5	100	M	P-268S	
Terrazole 2593-15-9	100	M	P-190S		1,2,4-Triazole 288-88-0	100	M	P-627S	
1,2,4,5-Tetrachlorobenzene 95-94-3	100 2,000	M H	APP-9-191 M-8120-09		Triazophos 24017-47-8	100	M	P-334S	
1,1,1,2-Tetrachloroethane 630-20-6	200 2,000	M M	M-502-43 M-502-43-10X		Tribromoacetic acid 75-96-7	200	MT	M-552.2A-09	

* ColdPAK required to maintain integrity of product.

Analytes in EPA Methods continued on next page



Analytes in EPA Methods

Solvent Key for Individual Solutions

M Methanol D Methylene chloride H Hexane W Water
A Acetone CN Acetonitrile MT *tert*-Butyl methyl ether

Analytes in EPA Methods

Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL	Compound CAS No.	Conc. (µg/mL)	Solv.	Cat. No.	1 mL
1,3,5-Tribromobenzene 626-39-1	50	A	M-8121-IS		Tricyclazole 41814-78-2	100	M	P-090S	
2,4,6-Tribromophenol 118-79-6	200	D	M-625-19		Triethylphosphate 78-40-0	100	M	P-335S	
2,4,6-Tribromophenol-PFB	200	M	M-604-SS		o,o,o-Triethylphosphorothioate 126-68-1	100	M	P-172S	
Tributylphosphate 126-73-8	1,000	A	M-8141A-SS-01		2',4',5'-Trifluoroacetophenone 129322-83-4	1,000	H	P-172S-H-10X	
Trichlorfon 52-68-6	100	M	P-044S		1,1,1-Trifluoroethane (Freon #143A)	20	CN	M-556-SS	
1,1,2-Trichloro-1,2,2-trifluoroethane 76-13-1	200	M	M-REF-14		Trifluoromethane (Freon #23)	200	M	M-REF-X-08	
1,1,1-Trichloro-2-propanone 918-00-3	2,000	M	M-REF-14-10X		a,a,a-Trifluorotoluene 98-08-8	200	M	M-REF-15	
Trichloroacetic acid 76-03-9	5,000	A	M-551B-8		Trifluralin 1582-09-8	200	M	M-602-SS	
Trichloroacetonitrile 545-06-2	20	MT	M-552.2A-10		2,3,5-Triiodobenzoic acid 88-82-4	2,000	M	M-602-SS-10X	
1,2,3-Trichlorobenzene 87-61-6	1,000	MT	M-552A-4 *		Trimethyl phosphate 512-56-1	100	M	P-197S	
1,2,4-Trichlorobenzene 120-82-1	5,000	A	M-551B-7		1,2,4-Trimethylbenzene 95-63-6	1,000	M	P-197S-10X	
2,3,5-Trichlorobenzoic acid 50-73-7	200	M	M-502-47		1,3,5-Trimethylbenzene 108-67-8	100	M	P-507S	
1,1,1-Trichloroethane 71-55-6	2,000	M	M-502-47-10X		Triphenylphosphate 115-86-6	100	CN	P-507S-CN	
1,1,2-Trichloroethane 79-00-5	200	M	M-502-48		2,3,5-Trimethacarb 2655-15-4	100	M	P-515S	
Trichloroethene 79-01-6	2,000	M	M-502-48-10X		3,4,5-Trimethacarb 2686-99-9	100	M	P-516S	
Trichlorofluoromethane (Freon #11) 75-69-4	100	M	P-508S		Trimethyl phosphite 512-56-1	100	M	P-210S	
Trichloronate 327-98-0	100	CN	P-508S-CN		1,2,4-Trimethylbenzene 95-63-6	200	M	M-502-54	
2,4,5-Trichlorophenol 95-95-4	200	M	M-502-49		1,3,5-Trimethylbenzene 108-67-8	2,000	M	M-502-54-10X	
2,4,6-Trichlorophenol 88-06-2	2,000	M	M-502-49-10X		1,3,5-Trinitrobenzene 99-35-4	200	M	M-502-55	
3,4,5-Trichlorophenol 609-19-8	200	M	M-502-50		Triphenylphosphate 115-86-6	2,000	M	M-502-55-10X	
1,1,2-Trichloropropane 598-77-6	2,000	M	M-502-51		Vacor 53558-25-1	100	M:CN	M-8330-12-0.1X	
1,2,3-Trichloropropane 96-18-4	200	M	M-502-52		Vernolate 1929-77-7	1,000	M:CN	M-8330-12	
a,a,a-Trifluorotoluene 98-07-7	2,000	M	M-502-52-10X		Vinclozolin 50471-44-8	500	MT	M-507-IS	
Triclopyr 55335-06-3	100	M	P-127S		Vinyl acetate 108-05-4	5,000	MT	M-507-IS-10X	
Triclopyr methyl ester 60825-26-5	1,000	H	M-8140-20		Vinyl chloride 75-01-4	100	M	P-240S	
Tricresyl phosphate 1330-78-5	100	A	CLP-FC		o-Xylene 95-47-6	100	CN	M-632.1-1	
	100	M	M-8040-18		m-Xylene 108-38-3	100	M	P-111S	
	100	MT	M-552A-R-08 *		p-Xylene 106-42-3	100	M	P-122S	
	1,000	M	M-8040-19		Xylene (total) 1330-20-7	1,000	M	P-122S-10X	
	1,000	M	M-1653-IS		Ziram 137-30-4	100	M	APP-9-211 *	
	1,000	A	M-1653-IS-R						
	200	M	S-1321B						
	200	M	M-502-53						
	2,000	M	M-502-53-10X						
	200	M	M-624-SS-14						
	100	M	P-289S						
	100	CN	P-289S-CN						
	100	M	P-291S						
	100	M	P-209S						

* ColdPAK required to maintain integrity of product.



Thousands of Standards, just a click away

AccuStandard.com

In 1980, the US Congress addressed the problem of cleaning up abandoned and inactive dump sites by enacting the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA). These acts mandated the clean-up of the worst abandoned or inactive waste sites in the nation as well as leaking underground storage tanks.

These standards are routinely used for other testing protocols. An outgrowth of this legislation was the Contract Laboratory Program (CLP) which was established to perform Superfund analyses.

CLP methods are designed for both volatile and semi-volatile compounds. The most recent EPA Target Compounds are listed in the OLM 04.1 and OLM 04.2 Statement of Work.



CLP Contents

Volatiles	126-129
Target Compound List	126-129
OLM 4.1 and OLM 4.2 Volatiles	126-127
Low Concentration Target Compound List	129
Semi-Volatiles	130-136
Priority Pollutant Standards	130-131
Target Compound List and Auxillary Standards	132
Semi-Volatiles	133-134
GPC Solutions	134
Low Concentration Target Compound List	135
OLM 04.1 and OLM 04.2 Semi-Volatiles	136
Pesticide Mixtures	137-139
Pesticides, PCBs and Aroclors	137-138
Working Levels	139

CLP

All the Analytical Documentation required in CLP Analysis

Each CLP Standard is furnished with:

- Quantitative analysis of the product by comparison to a separately prepared Standard.
- Target concentration analytically determined to be within a 95% confidence interval.
- A chromatogram of the product lot with analytes listed by order of elution and instrumental parameters shown.
- Certificate showing actual gravimetric/volumetric weights, purities and analyte CAS No.'s.



VOC Selected Target Compound Solutions

Volatile Target Compounds List (TCL)

CLP-022-SET *

set of 2 x 1 mL

(CLP-022-PART-A, CLP-022-PART-B)

Part A

CLP-022-PART-A

0.5 mg/mL each in MeOH

1 x 1 mL

29 comps.

Benzene	1,2-Dichloropropane
Bromodichloromethane	<i>cis</i> -1,3-Dichloropropene *
Bromoform	<i>trans</i> -1,3-Dichloropropene **
Bromomethane	Ethylbenzene
Carbon tetrachloride	1,1,2,2-Tetrachloroethane
Chlorobenzene	Tetrachloroethene
Chloroethane	Toluene
Chloroform	1,1,1-Trichloroethane
Chloromethane	1,1,2-Trichloroethane
Dibromochloromethane	Trichloroethene
1,1-Dichloroethane	Vinyl chloride
Dichloromethane	<i>m</i> -Xylene
1,2-Dichloroethane	<i>p</i> -Xylene
1,1-Dichloroethylene	* <i>cis</i> (1.06 x conc.)
<i>cis</i> -1,2-Dichloroethylene	** <i>trans</i> (0.94 x conc.)
<i>trans</i> -1,2-Dichloroethylene	

Part B

CLP-022-PART-B *

0.5 mg/mL each in MeOH

1 x 1 mL

8 comps.

Acetone	4-Methyl-2-pentanone
2-Butanone	Styrene
Carbonylsulfide	Vinyl acetate
2-Hexanone	<i>o</i> -Xylene

Volatile Target Compounds List (TCL)

Gases

CLP-022G	0.2 mg/mL each in MeOH		1 x 1 mL
CLP-022G-PAK	0.2 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-022G-10X	2.0 mg/mL each in MeOH		1 x 1 mL
CLP-022G-10X-PAK	2.0 mg/mL each in MeOH	SAVE	5 x 1 mL
			4 comps.

Bromomethane	Chloromethane
Chloroethane	Vinyl chloride

Ketones

CLP-022K *	0.2 mg/mL each in MeOH	1 x 1 mL
CLP-022K-10X *	2.0 mg/mL each in MeOH	1 x 1 mL
CLP-022K-25X *	5.0 mg/mL each in MeOH	1 x 1 mL
		4 comps.

Acetone	2-Hexanone
2-Butanone	4-Methyl-2-pentanone

Volatile Target Compounds List (TCL)

CLP-022 *

0.2 mg/mL each in MeOH

1 x 1 mL

37 comps.

Acetone	1,2-Dichloropropane
Benzene	<i>cis</i> -1,3-Dichloropropene *
Bromodichloromethane	<i>trans</i> -1,3-Dichloropropene **
Bromoform	Ethylbenzene
Bromomethane	2-Hexanone
2-Butanone	4-Methyl-2-pentanone
Carbonylsulfide	Styrene
Carbon tetrachloride	1,1,2,2-Tetrachloroethane
Chlorobenzene	Tetrachloroethene
Chloroethane	Toluene
Chloroform	1,1,1-Trichloroethane
Chloromethane	1,1,2-Trichloroethane
Dibromochloromethane	Trichloroethene
1,1-Dichloroethane	Vinyl acetate
Dichloromethane	Vinyl chloride
1,2-Dichloroethane	<i>m</i> -Xylene
1,1-Dichloroethylene	<i>o</i> -Xylene
<i>cis</i> -1,2-Dichloroethylene	<i>p</i> -Xylene
<i>trans</i> -1,2-Dichloroethylene	* <i>cis</i> (1.06 x conc.)
	** <i>trans</i> (0.94 x conc.)

CLP-022-R2 *

0.2 mg/mL each in MeOH

1 x 1 mL

36 comps.

Acetone	1,2-Dichloropropane
Benzene	<i>cis</i> -1,3-Dichloropropene *
Bromodichloromethane	<i>trans</i> -1,3-Dichloropropene **
Bromoform	Ethylbenzene
Bromomethane	2-Hexanone
2-Butanone	4-Methyl-2-pentanone
Carbonylsulfide	Styrene
Carbon tetrachloride	1,1,2,2-Tetrachloroethane
Chlorobenzene	Tetrachloroethene
Chloroethane	Toluene
Chloroform	1,1,1-Trichloroethane
Chloromethane	1,1,2-Trichloroethane
Dibromochloromethane	Trichloroethene
1,1-Dichloroethane	Vinyl chloride
Dichloromethane	<i>m</i> -Xylene
1,2-Dichloroethane	<i>o</i> -Xylene
1,1-Dichloroethylene	<i>p</i> -Xylene
<i>cis</i> -1,2-Dichloroethylene	* <i>cis</i> (1.06 x conc.)
<i>trans</i> -1,2-Dichloroethylene	** <i>trans</i> (0.94 x conc.)

Technical Note

AccuStandard provides CLP Volatile Target Compound List in a single solution in two versions. CLP-022-R2 (Vinyl acetate was removed from the TCL PLM03.1), for CLP laboratories following SOW OLM01.8 (August 1994). CLP-022-SET will continue to be available as an alternate source of reference material.

* ColdPAK required to maintain integrity of product.

Contract Laboratory Program (CLP)

Auxiliary Volatiles

CLP

Volatiles

Volatile Calibration Check Compounds (CCC)

CLP-020	0.2 mg/mL each in MeOH		1 x 1 mL
CLP-020-PAK	0.2 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-020-10X	2.0 mg/mL each in MeOH		1 x 1 mL
CLP-020-10X-PAK	2.0 mg/mL each in MeOH	SAVE	5 x 1 mL
			6 comps.

Chloroform	Ethylbenzene
1,1-Dichloroethene	Toluene
1,2-Dichloropropane	Vinyl chloride

Volatile System Performance Check Compounds (SPCC)

CLP-021	0.2 mg/mL each in MeOH		1 x 1 mL
CLP-021-PAK	0.2 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-021-10X	2.0 mg/mL each in MeOH		1 x 1 mL
CLP-021-10X-PAK	2.0 mg/mL each in MeOH	SAVE	5 x 1 mL
			5 comps.

Bromoform	1,1-Dichloroethane
Chlorobenzene	1,1,2,2-Tetrachloroethane
Chloromethane	

Hexadecane Extraction Volatiles

CLP-BTEX	0.2 mg/mL each in MeOH		1 x 1 mL
CLP-BTEX-PAK	0.2 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-BTEX-10X	2.0 mg/mL each in MeOH		1 x 1 mL
CLP-BTEX-10X-PAK	2.0 mg/mL each in MeOH	SAVE	5 x 1 mL
			6 comps.

Benzene	m-Xylene
Ethylbenzene	o-Xylene
Toluene	p-Xylene

CLP-001B		1 x 1 mL
1.0 mg/mL each in MeOH		2 comps.
n-Decane	n-Nonane	

Instrument Performance Check Solution

CLP-004	25 µg/mL in MeOH		1 x 1 mL
CLP-004-PAK	25 µg/mL in MeOH	SAVE	5 x 1 mL
CLP-004-10X	250 µg/mL in MeOH		1 x 1 mL
CLP-004-10X-PAK	250 µg/mL in MeOH	SAVE	5 x 1 mL
CLP-004-80X	2000 µg/mL in MeOH		1 x 1 mL
CLP-004-80X-PAK	2000 µg/mL in MeOH	SAVE	5 x 1 mL
CLP-004-100X	2500 µg/mL in MeOH		1 x 1 mL
CLP-004-100X-PAK	2500 µg/mL in MeOH	SAVE	5 x 1 mL
CLP-004-1000X	25 mg/mL in MeOH		1 x 1 mL

p-Bromofluorobenzene

Purgeable Surrogate Standard

CLP-PS	0.25 mg/mL each in MeOH		1 x 1 mL
CLP-PS-PAK	0.25 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-PS-4X	1.0 mg/mL each in MeOH		1 x 1 mL
CLP-PS-4X-PAK	1.0 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-PS-10X	2.5 mg/mL each in MeOH		1 x 1 mL
CLP-PS-10X-PAK	2.5 mg/mL each in MeOH	SAVE	5 x 1 mL
			3 comps.

p-Bromofluorobenzene	Toluene-d ₈
1,2-Dichloroethane-d ₄	

Purgeable Internal Standard

CLP-PI-0.25X	0.25 mg/mL each in MeOH		1 x 1 mL
CLP-PI-0.25X-PAK	0.25 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-PI	1.0 mg/mL each in MeOH		1 x 1 mL
CLP-PI-PAK	1.0 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-PI-2.5X	2.5 mg/mL each in MeOH		1 x 1 mL
CLP-PI-2.5X-PAK	2.5 mg/mL each in MeOH	SAVE	5 x 1 mL
			3 comps.

Bromochloromethane	1,4-Difluorobenzene
Chlorobenzene-d ₅	

Purgeable Internal/Surrogate Standard

CLP-PIPS		1 x 1 mL
CLP-PIPS-PAK	SAVE	5 x 1 mL
2.5 mg/mL each in MeOH		6 comps.

Bromochloromethane	1,2-Dichloroethane-d ₄
p-Bromofluorobenzene	1,4-Difluorobenzene
Chlorobenzene-d ₅	Toluene-d ₈

Purgeable Organic Matrix Spiking Solution

CLP-003-R	0.25 mg/mL each in MeOH		1 x 1 mL
CLP-003-R-PAK	0.25 mg/mL each in MeOH	SAVE	5 x 1 mL
CLP-003-R-10X	2.5 mg/mL each in MeOH		1 x 1 mL
CLP-003-R-10X-PAK	2.5 mg/mL each in MeOH	SAVE	5 x 1 mL
			5 comps.

Benzene	Toluene
Chlorobenzene	Trichloroethene
1,1-Dichloroethene	

Many Higher Concentrations are the Same Price

Aldehydes and Ketones in Alcohol Solvents

Standards containing aldehydes and ketones in methanol are given shorter expiration periods because of their tendency to form acetals and ketals. AccuStandard adds stabilizers to inhibit this reaction. To enhance stability, freezer storage is required.

Buy AccuPAKs™
Save 20-40% 5 x 1 mL



Contract Laboratory Program (CLP)

Volatiles (continued)

CLP OLM 04.1 & 04.2 - Volatiles

The set of volatile standards along with a complete semi-volatile series meets OLM 04.1, and also can be used for OLM 04.2.

CLP OLM 04.1 & 04.2 - Volatiles Set

CLP-VOC-SET * 9 x 1 mL (CLP-022-R3, M-601B, CLP-022K-10X, CLP-BTEX, CLP-PS-10X, CLP-PI-2.5X, CLP-PIPS, CLP-003R-10X, CLP-004-10X)

CLP OLM 04.1 & 04.2 - Volatile Target Compound List

CLP-022-R3 1x 1 mL
CLP-022-R3-PAK 5x 1 mL
200 µg/mL in MeOH 40 comps.

SAVE

Benzene	1,2-Dichloropropane
Bromodichloromethane	cis-1,3-Dichloropropene
Bromoform	trans-1,3-Dichloropropene
Carbon disulfide	Ethylbenzene
Carbon tetrachloride	Isopropylbenzene
Chlorobenzene	Methyl acetate
Chloroform	Methylcyclohexane
1,2-Dibromo-3-chloropropane	MtBE
Cyclohexane	Styrene
Dibromochloromethane	1,1,2,2-Tetrachloroethane
1,2-Dibromoethane	Tetrachloroethene
1,2-Dichlorobenzene	Toluene
1,3-Dichlorobenzene	1,2,4-Trichlorobenzene
1,4-Dichlorobenzene	1,1,1-Trichloroethane
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	Trichloroethene
1,1-Dichloroethene	1,1,2-Trichloro-1,2,2-trifluoroethane
cis-1,2-Dichloroethene	m-Xylene
trans-1,2-dichloroethene	p-Xylene
Dichloromethane	o-Xylene

Purgeable Surrogate Standard

CLP-PS-10X 1x 1 mL
CLP-PS-10X-PAK 5x 1 mL
2.5 mg/mL each in MeOH 3 comps.

SAVE

p-Bromofluorobenzene	Toluene-d ₈
1,2-Dichloroethane-d ₄	

Purgeable Internal Standard

CLP-PI-2.5X 1x 1 mL
CLP-PI-2.5X-PAK 5x 1 mL
2.5 mg/mL each in MeOH 3 comps.

SAVE

Bromochloromethane	1,4-Difluorobenzene
Chlorobenzene-d ₅	

Purgeable Internal/Surrogate Standard

CLP-PIPS 1x 1 mL
CLP-PIPS-PAK 5x 1 mL
2.5 mg/mL each in MeOH 6 comps.

SAVE

Bromochloromethane	1,2-Dichloroethane-d ₄
p-Bromofluorobenzene	1,4-Difluorobenzene
Chlorobenzene-d ₅	Toluene-d ₈

Gases

M-601B 1x 1 mL
M-601B-PAK 5x 1 mL
0.2 mg/mL each in MeOH 6 comps.

SAVE

Bromomethane	Dichlorodifluoromethane
Chloromethane	Trichlorofluoromethane
Chloroethane	Vinyl chloride

Ketones

CLP-022K 1x 1 mL
0.2 mg/mL each in MeOH
CLP-022K-10X 1x 1 mL
2.0 mg/mL each in MeOH 4 comps.

Acetone	2-Hexanone
2-Butanone	4-Methyl-2-pentanone

Purgeable Organic Matrix Spiking Solution

CLP-003-R-10X 1x 1 mL
CLP-003-R-10X-PAK 5x 1 mL
2.5 mg/mL each in MeOH 5 comps.

SAVE

Benzene	Toluene
Chlorobenzene	Trichloroethene
1,1-Dichloroethene	

Instrument Performance Check Solution

CLP-004-10X 1x 1 mL
CLP-004-10X-PAK 5x 1 mL
250 µg/mL in MeOH

SAVE

CLP-004-100X 1x 1 mL
CLP-004-100X-PAK 5x 1 mL
2500 µg/mL in MeOH

SAVE

p-Bromofluorobenzene

CLP 04.1 & 04.2 Screening Mix

CLP-BTEX 1x 1 mL
CLP-BTEX-PAK 5x 1 mL
0.2 mg/mL each in MeOH 6 comps.

SAVE

CLP-BTEX-10X 1x 1 mL
CLP-BTEX-10X-PAK 5x 1 mL
2.0 mg/mL each in MeOH 6 comps.

SAVE

Benzene	m-Xylene
Ethylbenzene	o-Xylene
Toluene	p-Xylene

* ColdPAK required to maintain integrity of product.

Contract Laboratory Program (CLP)

Volatiles (continued)

CLP

Low Concentration SOW (10/92) Organic Analysis of Water

Volatile Target Compounds Mix

CLP-022-LC

0.2 mg/mL each in MeOH (except indicated)

1 x 1 mL

42 comps.

Acetone (1.0 mg/mL)	1,2-Dichloroethane
Benzene	1,1-Dichloroethylene
Bromochloromethane	cis-1,2-Dichloroethylene
Bromodichloromethane	trans-1,2-Dichloroethylene
Bromoform	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene *
2-Butanone (1.0 mg/mL)	trans-1,3-Dichloropropene **
Carbon disulfide	Ethylbenzene
Carbon tetrachloride	2-Hexanone (1.0 mg/mL)
Chlorobenzene	4-Methyl-2-pentanone (1.0 mg/mL)
Chloroethane	Styrene
Chloroform	1,1,2,2-Tetrachloroethane
Chloromethane	Tetrachloroethene
Dibromochloromethane	Toluene
1,2-Dibromo-3-chloropropane	1,1,1-Trichloroethane
1,2-Dibromoethane	1,1,2-Trichloroethane
1,2-Dichlorobenzene	Trichloroethene
1,3-Dichlorobenzene	Vinyl chloride
1,4-Dichlorobenzene	o-Xylene
1,1-Dichloroethane	m-Xylene
Dichloromethane	p-Xylene

* cis (1.06 x conc.)

** trans (0.94 x conc.)

Tuning Solution / Surrogate Standard Mix

CLP-004

25 µg/mL in MeOH

1 x 1 mL

CLP-004-PAK

25 µg/mL in MeOH

SAVE

5 x 1 mL

CLP-004-10X

0.25 mg/mL in MeOH

1 x 1 mL

CLP-004-10X-PAK

0.25 mg/mL in MeOH

SAVE

5 x 1 mL

CLP-004-100X

2.5 mg/mL in MeOH

1 x 1 mL

CLP-004-100X-PAK

2.5 mg/mL in MeOH

SAVE

5 x 1 mL

CLP-004-1000X

25 mg/mL in MeOH

1 x 1 mL

p-Bromofluorobenzene

Laboratory Control Sample Spiking Solution

CLP-LCS-V

1 x 1 mL

CLP-LCS-V-PAK

SAVE

5 x 1 mL

0.2 mg/mL each in MeOH

12 comps.

Benzene
Bromoform
Carbon tetrachloride
1,2-Dibromoethane
1,4-Dichlorobenzene
1,2-Dichloroethane

1,2-Dichloropropane
cis-1,3-Dichloropropene *
Tetrachloroethene
1,1,2-Trichloroethane
Trichloroethene
Vinyl chloride

* may contain trace amounts of trans isomer

Internal Standard Mix

CLP-LC-IS

25 µg/mL each in MeOH

1 x 1 mL

CLP-LC-IS-PAK

25 µg/mL each in MeOH

SAVE

5 x 1 mL

CLP-LC-IS-10X

0.25 mg/mL each in MeOH

1 x 1 mL

CLP-LC-IS-10X-PAK

0.25 mg/mL each in MeOH

SAVE

5 x 1 mL

CLP-LC-IS-100X

2.5 mg/mL each in MeOH

1 x 1 mL

CLP-LC-IS-100X-PAK

2.5 mg/mL each in MeOH

SAVE

5 x 1 mL

3 comps.

Chlorobenzene-d₆
1,4-Dichlorobenzene-d₄

1,4-Difluorobenzene

Storage Conditions

Most VOC formulations require refrigeration or freezer storage to inhibit adverse reactions among the components. It is imperative that these conditions are followed.

2-Part Label System

Smudgeproof, tear and solvent resistant * (Organic products in ampules)

Part One can be placed into a laboratory journal to document the standard used for the analysis. This label section includes the catalog number, description, lot number, expiration, date safety information, proper storage conditions and documents AccuStandard as the manufacturer.

Part Two duplicates required information for labeling transfer vial(s) with correct information.

* Includes the most common solvents: Methylene chloride, Methanol and Acetone



Priority Pollutants - Standards for Calibration of Capillary GC/MS

The EPA procedures call for fused silica capillary column analysis of priority pollutants. AccuStandard has assembled the following mixtures to be used in calibrating this analytical system. These mixtures are highly concentrated to aid in the establishment of response factors.

Base/Neutrals - Mix #1

Z-014A 1 x 1 mL
Z-014A-PAK **SAVE** 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂ 14 comps.

4-Bromophenylphenyl ether
 Butyl benzyl phthalate
 bis(2-Chloroethoxy)methane
 bis(2-Chloroethyl) ether
 bis(2-Chloro-1-methylethyl) ether
 4-Chlorophenylphenyl ether
 Diethyl phthalate
 Dimethyl phthalate
 Di-*n*-butyl phthalate
 Di-*n*-octyl phthalate
 bis(2-Ethylhexyl)phthalate
 N-Nitrosodimethylamine
 N-Nitrosodi-*n*-propylamine
 N-Nitrosodiphenylamine

Base/Neutrals - Mix #2

Z-014B 1 x 1 mL
Z-014B-PAK **SAVE** 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂ 14 comps.

Azobenzene
 2-Chloronaphthalene
 1,2-Dichlorobenzene
 1,3-Dichlorobenzene
 1,4-Dichlorobenzene
 2,4-Dinitrotoluene
 2,6-Dinitrotoluene
 Hexachlorobenzene
 Hexachlorobutadiene
 Hexachlorocyclopentadiene
 Hexachloroethane
 Isophorone
 Nitrobenzene
 1,2,4-Trichlorobenzene

Benzidine Mix

Z-014F 1 x 1 mL
Z-014F-PAK **SAVE** 5 x 1 mL
 2.0 mg/mL each in MeOH 2 comps.

Benzidine
 3,3'-Dichlorobenzidine

Phenols Mix

Z-014H 1 x 1 mL
Z-014H-PAK **SAVE** 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂ 11 comps.

4-Chloro-3-methylphenol
 2-Chlorophenol
 2,4-Dichlorophenol
 2,4-Dimethylphenol
 2,4-Dinitrophenol
 2-Methyl-4,6-dinitrophenol
 2-Nitrophenol
 4-Nitrophenol
 Pentachlorophenol
 Phenol
 2,4,6-Trichlorophenol

Technical Note

2,4-Dinitrophenol, 4-nitrophenol, and pentachlorophenol are susceptible to adsorption on active surfaces found in injection ports or contaminated columns.

Toxic Substances - Mix #1

Z-014D 1 x 1 mL
Z-014D-PAK **SAVE** 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂ 4 comps.

Benzoic acid
 2-Methylphenol
 4-Methylphenol
 2,4,5-Trichlorophenol

Toxic Substances - Mix #2

Z-014E 1 x 1 mL
Z-014E-PAK **SAVE** 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂ 8 comps.

Aniline
 Benzyl alcohol
 4-Chloroaniline
 Dibenzofuran
 2-Methylnaphthalene
 2-Nitroaniline
 3-Nitroaniline
 4-Nitroaniline

Internal Standards Mixture

Z-014J 1 x 1 mL
Z-014J-PAK **SAVE** 5 x 1 mL
 4.0 mg/mL each in CH₂Cl₂ 6 comps.

Z-014J-0.5X 1 x 1 mL
Z-014J-0.5X-PAK 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂ 6 comps.

Acenaphthene-d₁₀
 Chrysene-d₁₂
 1,4-Dichlorobenzene-d₄
 Naphthalene-d₈
 Perylene-d₁₂
 Phenanthrene-d₁₀

PAH Mix

Z-014G 1 x 1 mL
Z-014G-PAK **SAVE** 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂: Benzene (50:50) 16 comps.

Acenaphthene
 Acenaphthylene
 Anthracene
 Benz[a]anthracene
 Benzo[a]pyrene
 Benzo[b]fluoranthene
 Benzo[g,h,i]perylene
 Benzo[k]fluoranthene
 Chrysene
 Dibenz[a,h]anthracene
 Fluoranthene
 Fluorene
 Indeno[1,2,3-cd]pyrene
 Naphthalene
 Phenanthrene
 Pyrene

PAH Mix

Z-014G-R 1 x 1 mL
Z-014G-R-PAK **SAVE** 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂: Benzene (50:50) 17 comps.

Acenaphthene
 Acenaphthylene
 Anthracene
 Benz[a]anthracene
 Benzo[a]pyrene
 Benzo[b]fluoranthene
 Benzo[g,h,i]perylene
 Benzo[k]fluoranthene
 Carbazole
 Chrysene
 Dibenz[a,h]anthracene
 Fluoranthene
 Fluorene
 Indeno[1,2,3-cd]pyrene
 Naphthalene
 Phenanthrene
 Pyrene

Expanded PAH Mix

Z-014G-FL 1 x 1 mL
 2.0 mg/mL each in
 Dichloromethane: Benzene (50:50) 18 comps.

Acenaphthene
 Acenaphthylene
 Anthracene
 Benz[a]anthracene
 Benzo[a]pyrene
 Benzo[b]fluoranthene
 Benzo[g,h,i]perylene
 Benzo[k]fluoranthene
 Chrysene
 Dibenz[a,h]anthracene
 Fluoranthene
 Fluorene
 Indeno[1,2,3-cd]pyrene
 Naphthalene
 Phenanthrene
 Pyrene
 1-Methylnaphthalene
 2-Methylnaphthalene

Priority Pollutants - Standards for Calibration of Capillary GC/MS - Complete Sets (Continued)

Z-014R-SET 9 x 1 mL
Set includes:
Z-014A Base/Neutrals - Mix #1
Z-014B Base/Neutrals - Mix #2
Z-014C Pesticides - Mix #1
Z-014D Toxic Substances - Mix #1
Z-014E Toxic Substances - Mix #2
Z-014F Benzidine Mix
Z-014G-R PAH Mix
Z-014H Phenols Mix
Z-014J Internal Standard Mix

Z-014R-1-SET 9 x 1 mL
Set includes:
Z-014A Base/Neutrals - Mix #1
Z-014B Base/Neutrals - Mix #2
Z-014C-R Pesticides - Mix #2
Z-014D Toxic Substances - Mix #1
Z-014E Toxic Substances - Mix #2
Z-014F Benzidine Mix
Z-014G-R PAH Mix
Z-014H Phenols Mix
Z-014J Internal Standard Mix

Z-014R-2-SET 7 x 1 mL
Set includes:
Z-014A Base/Neutrals - Mix #1
Z-014B Base/Neutrals - Mix #2
Z-014D Toxic Substances - Mix #1
Z-014E Toxic Substances - Mix #2
Z-014F Benzidine Mix
Z-014G PAH Mix
Z-014H Phenols Mix

Z-014R-3-SET 7 x 1 mL
Set includes:
Z-014A Base/Neutrals - Mix #1
Z-014B Base/Neutrals - Mix #2
Z-014D Toxic Substances - Mix #1
Z-014E Toxic Substances - Mix #2
Z-014F Benzidine Mix
Z-014G-R PAH Mix
Z-014H Phenols Mix

Order a complete Set and Save

Pesticides - Mix #1

Z-014C 1 x 1 mL
Z-014C-PAK **SAVE** 5 x 1 mL
2.0 mg/mL each in Toluene:Hexane (50:50)
16 comps.

Aldrin	Dieldrin
α-BHC	Endosulfan I
β-BHC	Endosulfan II
γ-BHC	Endosulfan sulfate
δ-BHC	Endrin
4,4'-DDD	Endrin aldehyde
4,4'-DDE	Heptachlor
4,4'-DDT	Heptachlor epoxide

Pesticides - Mix #2

Z-014C-R 1 x 1 mL
Z-014C-R-PAK **SAVE** 5 x 1 mL
2.0 mg/mL each in Toluene:Hexane (50:50)
20 comps.

Aldrin	Dieldrin
α-BHC	Endosulfan I
β-BHC	Endosulfan II
γ-BHC	Endosulfan sulfate
δ-BHC	Endrin
α-Chlordane	Endrin aldehyde
γ-Chlordane	Endrin ketone
4,4'-DDD	Heptachlor
4,4'-DDE	Heptachlor epoxide
4,4'-DDT	Methoxychlor

Pesticides - Mix #3

Z-014C-R2 1 x 1 mL
Z-014C-R2-PAK **SAVE** 5 x 1 mL
2.0 mg/mL each in Toluene:Hexane (50:50)
18 comps.

Aldrin	Endosulfan I
α-BHC	Endosulfan II
β-BHC	Endosulfan sulfate
γ-BHC	Endrin
δ-BHC	Endrin aldehyde
4,4'-DDD	Endrin ketone
4,4'-DDE	Heptachlor
4,4'-DDT	Heptachlor epoxide
Dieldrin	Methoxychlor

Tuning Standards for EPA Methods

M-625-TS 1 x 1 mL
M-625-TS-PAK **SAVE** 5 x 1 mL
50 µg/mL each in CH₂Cl₂ 4 comps.

Benzidine	DFTPP
p,p'-DDT	Pentachlorophenol

CLP-TS 1 x 1 mL
CLP-TS-PAK **SAVE** 5 x 1 mL
50 µg/mL in CH₂Cl₂

Perfluorokerosene

EPA Method 625 GC/MS Calibration Standards

M-625C-SET set of 5 x 1 mL
Individual Solutions M-625C-# each
At stated conc. in CH₂Cl₂

- (1) Benzidine (50 µg/mL)
- (2) Pentachlorophenol (25 µg/mL)
- (3) Decafluorotriphenylphosphine (25 µg/mL)
- (4) Benzidine (50 µg/mL) + DFTPP (25 µg/mL)
- (5) Pentachlorophenol (25 µg/mL) + DFTPP (25 µg/mL)

Buy AccuPAKs™
Save 20-40% 5 x 1 mL



Base/Neutral & Acid Composite Mixtures

For CLP Semi-Volatiles Analysis

CLP Target List

The following composite mixes were formulated to allow flexibility of preparing a final semi-volatile mix to meet your laboratory's specific needs. CLP-HC-BN-SET contains 46 of the Base-Neutral analytes on the CLP semi-volatile Target List. These Base-Neutral analytes are now available in a two ampule set to extend the useful life of your stock calibration standards. CLP-HC-A contains the acidic compounds found in the CLP Target List. An additional composite mix can then be selected to complement your exact requirements for semi-volatile analysis.

Base-Neutral

CLP-HC-BN-R

2.0 mg/mL each in Benzene : CH_2Cl_2 : AcCN (40:40:20)

44 comps.

Acenaphthene	Diethyl phthalate
Acenaphthylene	Dimethyl phthalate
Anthracene	2,4-Dinitrotoluene
Azobenzene	2,6-Dinitrotoluene
Benz[a]anthracene	Di- <i>n</i> -octyl phthalate
Benzo[b]fluoranthene	bis(2-Ethylhexyl)phthalate
Benzo[k]fluoranthene	Fluoranthene
Benzo[g,h,i]perylene	Fluorene
Benzo[a]pyrene	Hexachlorobenzene
4-Bromophenyl phenyl ether	Hexachlorobutadiene
Butyl benzyl phthalate	Hexachlorocyclopentadiene
bis(2-Chloroethoxy)methane	Hexachloroethane
bis(2-Chloroethyl)ether	Indeno[1,2,3-cd]pyrene
bis(2-Chloro-1-methylethyl) ether	Isophorone
2-Chloronaphthalene	Naphthalene
4-Chlorophenyl phenyl ether	Nitrobenzene
Chrysene	N-Nitrosodimethylamine
Dibenz[a,h]anthracene	N-Nitrosodiphenylamine
Di- <i>n</i> -butyl phthalate	N-Nitrosodi- <i>n</i> -propylamine
1,2-Dichlorobenzene	Phenanthrene
1,3-Dichlorobenzene	Pyrene
1,4-Dichlorobenzene	1,2,4-Trichlorobenzene

Benzidine

Z-014F

2.0 mg/mL each in MeOH

2 comps.

Benzidine	3,3'-Dichlorobenzidine
-----------	------------------------

CLP-HC-BN-R

CLP-HC-BN-R-PAK

Z-014F

SAVE

1 x 1 mL

5 x 1 mL

1 x 1 mL

CLP Target List Set

CLP-HC-BN-SET

CLP-HC-BN-SET-PAK

2 x 1 mL

(CLP-HC-BN-R, Z-014F)

SAVE

5 x (2 x 1 mL)

Acid Composite Mix

CLP-HC-A-R

CLP-HC-A-R-PAK

2.0 mg/mL each in CH_2Cl_2

SAVE

1 x 1 mL

5 x 1 mL

19 comps.

Benzoic acid
4-Chloro-3-methylphenol
2-Chlorophenol
o-Cresol
p-Cresol
2,4-Dichlorophenol
2,6-Dichlorophenol
2,4-Dimethylphenol
4,6-Dinitro-2-methylphenol
2,4-Dinitrophenol

Ethyl methanesulfonate
Methyl methanesulfonate
2-Nitrophenol
4-Nitrophenol
Pentachlorophenol
Phenol
2,3,4,6-Tetrachlorophenol
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol

Technical Note

Azobenzene was substituted for 1,2-Diphenylhydrazine because the 1,2-Diphenylhydrazine loses hydrogen to form azobenzene under GC operating conditions.

Additional Composite Mixtures

Composite #1

Z-014E

2.0 mg/mL each in CH_2Cl_2

1 x 1 mL

8 comps.

Aniline	2-Methylnaphthalene
Benzyl alcohol	2-Nitroaniline
4-Chloroaniline	3-Nitroaniline
Dibenzofuran	4-Nitroaniline

Composite #2

Z-014E-R

2.0 mg/mL each in CH_2Cl_2

1 x 1 mL

9 comps.

Aniline	2-Nitroaniline
Benzyl alcohol	3-Nitroaniline
4-Chloroaniline	4-Nitroaniline
Dibenzofuran	Pyridine
2-Methylnaphthalene	

Composite #3

Z-014E-R3

2.0 mg/mL each in CH_2Cl_2

1 x 1 mL

10 comps.

Aniline	2-Methylnaphthalene
Benzyl alcohol	2-Nitroaniline
Carbazole	3-Nitroaniline
4-Chloroaniline	4-Nitroaniline
Dibenzofuran	Pyridine



Thousands of Standards, just a click away

AccuStandard.com

Contract Laboratory Program (CLP)

Semi-Volatiles

CLP

GC/MS Analysis of Semi-Volatiles

Method Analytes Mixture

CLP-TCLSV 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 3 comps.

Benzoic acid N-Nitrosodimethylamine
Benzyl alcohol

Calibration Check Compounds (CCC) Set

CLP-011-SET 2 x 1 mL
(CLP-011A, CLP-011B)

Base/Neutrals

CLP-011A 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 7 comps.

Acenaphthene Hexachlorobutadiene
Benzo[a]pyrene Fluoranthene
1,4-Dichlorobenzene N-Nitroso-diphenylamine
Di-n-octylphthalate

Acids

CLP-011B 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 6 comps.

4-Chloro-3-methylphenol Pentachlorophenol
2,4-Dichlorophenol Phenol
2-Nitrophenol 2,4,6-Trichlorophenol

Base/Neutrals & Acids Matrix Standard Spiking Sets

CLP-007-R-SET 2 x 1 mL (CLP-007A, CLP-007-2)
CLP-007-R-SET-PAK 5 x (2 x 1 mL) (CLP-007A, CLP-007-2)
CLP-007-SET 2 x 1 mL (CLP-007A, CLP-007B)

Base/Neutrals

CLP-007A 1 x 1 mL
1.0 mg/mL each in MeOH 6 comps.

Acenaphthene N-Nitroso-di-n-propylamine
1,4-Dichlorobenzene Pyrene
2,4-Dinitrotoluene 1,2,4-Trichlorobenzene

Acids

CLP-007-2 1 x 1 mL
1.5 mg/mL each in MeOH 5 comps.
CLP-007B 1 x 1 mL
2.0 mg/mL each in MeOH 5 comps.

2-Chlorophenol Pentachlorophenol
4-Chloro-3-methylphenol Phenol
4-Nitrophenol

Surrogate Standard

CLP-BNS-3-2X 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂
4-Terphenyl-d₁₄

Matrix Spike (SW 846 / Method 8270C/D)

CLP-007-WL-50ML 1 x 50 mL
At stated conc. in MeOH 11 comps.

4-Chloro-3-methyl phenol (200 µg/mL) 1,4-Dichlorobenzene (100 µg/mL)
2-Chlorophenol (200 µg/mL) 2,4-Dinitrotoluene (100 µg/mL)
4-Nitrophenol (200 µg/mL) N-Nitrosodi-n-propylamine (100 µg/mL)
Pentachlorophenol (200 µg/mL) Pyrene (100 µg/mL)
Phenol (200 µg/mL) 1,2,4-Trichlorobenzene (100 µg/mL)
Acenaphthene (100 µg/mL)

Internal Standards Mixture

Z-014J 1 x 1 mL
Z-014J-PAK 5 x 1 mL
4.0 mg/mL each in CH₂Cl₂ 6 comps.

Acenaphthene-d₁₀ Naphthalene-d₈
Chrysene-d₁₂ Perylene-d₁₂
1,4-Dichlorobenzene-d₄ Phenanthrene-d₁₀

System Performance Check Compounds (SPCC)

CLP-010 1 x 1 mL
0.2 mg/mL each in CH₂Cl₂
CLP-010-10X 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 4 comps.

2,4-Dinitrophenol 4-Nitrophenol
Hexachlorocyclopentadiene N-nitroso-di-n-propylamine

Semi-Volatile Organic Extract Calibration (Screening Mix)

CLP-009 1 x 1 mL
0.1 mg/mL each in CH₂Cl₂
CLP-009-10X 1 x 1 mL
1.0 mg/mL each in CH₂Cl₂ 3 comps.

Di-n-octylphthalate Phenol
Phenanthrene

Initial Calibration Target Compounds List

CLP-012 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 9 comps.

Benzoic acid 4-Nitroaniline
2,4-Dinitrophenol 4-Nitrophenol
4,6-Dinitro-2-methylphenol Pentachlorophenol
2-Nitroaniline 2,4,5-Trichlorophenol
3-Nitroaniline

Acid Surrogate Standard

CLP-AS 1 x 1 mL
CLP-AS-PAK 5 x 1 mL
2.0 mg/mL each in MeOH
CLP-AS-10X 1 x 1 mL
CLP-AS-10X-PAK 5 x 1 mL
20 mg/mL each in MeOH 3 comps.

2-Fluorophenol 2,4,6-Tribromophenol
Phenol-d₅

Base/Neutrals Surrogate Standard

CLP-BNS 1 x 1 mL
CLP-BNS-PAK 5 x 1 mL
1.0 mg/mL each in CH₂Cl₂
CLP-BNS-10X 1 x 1 mL
CLP-BNS-10X-PAK 5 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 3 comps.

2-Fluorobiphenyl p-Terphenyl-d₁₄
Nitrobenzene-d₅

Matrix Spike (3/90 SOW / Method 8270C/D)

CLP-007R-WL-50ML 1 x 50 mL
At stated conc. in MeOH 11 comps.

4-Chloro-3-methyl phenol (150 µg/mL) 1,4-Dichlorobenzene (100 µg/mL)
2-Chlorophenol (150 µg/mL) 2,4-Dinitrotoluene (100 µg/mL)
4-Nitrophenol (150 µg/mL) N-Nitrosodi-n-propylamine (100 µg/mL)
Pentachlorophenol (150 µg/mL) Pyrene (100 µg/mL)
Phenol (150 µg/mL) 1,2,4-Trichlorobenzene (100 µg/mL)
Acenaphthene (100 µg/mL)

Base/Neutral & Acid Composite Mixtures

For CLP Semi-Volatiles Analysis

August 1994 Statement of Work

Acid Surrogate Standards

CLP-029		1 x 1 mL
CLP-029-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		
CLP-029-0.75X		1 x 1 mL
CLP-029-0.75X-PAK	SAVE	5 x 1 mL
1.5 mg/mL each in MeOH		
2-Chlorophenol-d ₄	Phenol-d ₅	
2-Fluorophenol	2,4,6-Tribromophenol	

Semi-Volatile Surrogate Mixes

CLP-031-R		1 x 1 mL
CLP-031-R-PAK	SAVE	5 x 1 mL
At stated conc. in MeOH:CH ₂ Cl ₂ (50:50)		
2-Chlorophenol-d ₄	(1.5 mg/mL)	Nitrobenzene-d ₅ (1.0 mg/mL)
1,2-Dichlorobenzene-d ₄	(1.0 mg/mL)	Phenol-d ₅ (1.5 mg/mL)
2-Fluorobiphenyl	(1.0 mg/mL)	p-Terphenyl-d ₁₄ (1.0 mg/mL)
2-Fluorophenol	(1.5 mg/mL)	2,4,6-Tribromophenol (1.5 mg/mL)

CLP-031-R2		1 x 1 mL
CLP-031-R2-PAK	SAVE	5 x 1 mL
2000 µg/mL each in CH ₂ Cl ₂		
2-Chlorophenol-d ₄		Nitrobenzene-d ₅
1,2-Dichlorobenzene-d ₄		Phenol-d ₅
2-Fluorobiphenyl		p-Terphenyl-d ₁₄
2-Fluorophenol		2,4,6-Tribromophenol

Base/Neutral Surrogate Standard

CLP-030		1 x 1 mL
CLP-030-PAK	SAVE	5 x 1 mL
1.0 mg/mL each in CH ₂ Cl ₂		
1,2-Dichlorobenzene-d ₄	Nitrobenzene-d ₅	
2-Fluorobiphenyl	p-Terphenyl-d ₁₄	

Instrument Performance Check Solution

CLP-033		1 x 1 mL
CLP-033-PAK	SAVE	5 x 1 mL
0.25 mg/mL in CH ₂ Cl ₂		
Decafluorotriphenylphosphine (DFTPP)		

GC/MS Tuning Solution

CLP-TS		1 x 1 mL
CLP-TS-PAK	SAVE	5 x 1 mL
50 µg/mL in CH ₂ Cl ₂		
Perfluorokerosene		

GPC Solutions for Sample Clean-up

Semi-Volatiles (Gel Permeation)

GPC Calibration Standard Solution

CLP-027		1 x 1 mL
CLP-027-PAK	SAVE	5 x 1 mL
At stated conc. in CH ₂ Cl ₂		
Corn Oil	(250 mg/mL)	Perylene (0.2 mg/mL)
bis(2-Ethylhexyl)phthalate	(10 mg/mL)	Sulfur (0.8 mg/mL)
Methoxychlor	(2 mg/mL)	

8/94 SOW OLM03.1

CLP-027-R2		1 x 1 mL
CLP-027-R2-PAK	SAVE	5 x 1 mL
At stated conc. in CH ₂ Cl ₂		
Corn Oil	(250 mg/mL)	Perylene (0.2 mg/mL)
bis(2-Ethylhexyl)phthalate	(5 mg/mL)	Sulfur (0.8 mg/mL)
Methoxychlor	(1 mg/mL)	

Method 3640 - GPC Calibration Solutions and Set

Solution A

CLP-008A		1 x 1 mL
200 mg/mL in CH ₂ Cl ₂		
Corn Oil		

Solution B

CLP-008B-R		1 x 1 mL
4.0 mg/mL each in CH ₂ Cl ₂		
bis(2-Ethylhexyl)phthalate	Pentachlorophenol	2 comps.

CLP-008-R-SET

2 x 1 mL
(CLP-008A, CLP-008B-R)

Contract Laboratory Program (CLP)

Low Concentration SOW (10/92) for Organic Analysis of Water

CLP

Low Concentration SOW Semi-Volatiles

Base/Neutrals - Mix #1

Z-014A-LC 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 13 comps.

4-Bromophenylphenyl ether
Butyl benzyl phthalate
bis(2-Chloroethoxy)methane
bis(2-Chloroethyl) ether
bis(2-Chloro-1-methylethyl) ether
4-Chlorophenylphenyl ether
Diethyl phthalate
Dimethyl phthalate
Di-*n*-butyl phthalate
Di-*n*-octyl phthalate
bis(2-Ethylhexyl)phthalate
N-Nitrosodiphenylamine
N-Nitrosodi-*n*-propylamine

Base/Neutrals - Mix #2

Z-014B-LC 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 14 comps.

4-Chloroaniline
2-Chloronaphthalene
Dibenzofuran
3,3'-Dichlorobenzidine
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Isophorone
2-Methylnaphthalene
Nitrobenzene
1,2,4-Trichlorobenzene

Base/Neutrals - Mix #3

Z-014K-LC 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 8 comps.

2,4-Dinitrophenol
2-Methyl-4,6-dinitrophenol
2-Nitroaniline
3-Nitroaniline
4-Nitroaniline
4-Nitrophenol
Pentachlorophenol
2,4,5-Trichlorophenol

Polynuclear Aromatic Hydrocarbon Mix

Z-014G 1 x 1 mL
Z-014G-PAK 5 x 1 mL
2.0 mg/mL each in CH₂Cl₂:Benzene (50:50) **SAVE** 16 comps.

Acenaphthene
Acenaphthylene
Anthracene
Benz[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenz[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
Naphthalene
Phenanthrene
Pyrene

Phenols Mixture

Z-014H-LC 1 x 1 mL
Z-014H-LC-PAK 5 x 1 mL
2.0 mg/mL each in CH₂Cl₂ **SAVE** 9 comps.

4-Chloro-3-methylphenol
2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2-Methylphenol
4-Methylphenol
2-Nitrophenol
Phenol
2,4,6-Trichlorophenol

Laboratory Control Sample Spiking Solution

CLP-LCS-SV-SET 2 x 1 mL
CLP-LCS-SV-R1 1 x 1 mL
At stated conc. in Acetone:MeOH (90:10)
14 comps.

Benzo[a]pyrene (20 µg/mL)
2-Chlorophenol (40 µg/mL)
bis(2-Chloroethyl) ether (20 µg/mL)
Diethylphthalate (20 µg/mL)
2,4-Dinitrotoluene (20 µg/mL)
Hexachlorobenzene (20 µg/mL)
Hexachloroethane (20 µg/mL)
Isophorone (20 µg/mL)
Naphthalene (20 µg/mL)
N-Nitrosodi-*n*-propylamine (20 µg/mL)
N-Nitrosodiphenylamine (20 µg/mL)
Phenol (40 µg/mL)
1,2,4-Trichlorobenzene (20 µg/mL)
2,4,6-Trichlorophenol (40 µg/mL)

CLP-LCS-SV-ADD 1 x 1 mL
40 µg/mL in Acetone:MeOH (9:1)
4-Chloroaniline

Tuning Solution

M-625C-3-2X 1 x 1 mL
50 µg/mL in CH₂Cl₂
Decafluorotriphenylphosphine

Internal Standard

Z-014J-0.5X 1 x 1 mL
Z-014J-0.5X-PAK 5 x 1 mL
2.0 mg/mL each in CH₂Cl₂ **SAVE** 6 comps.
Acenaphthene-d₁₀
Chrysene-d₁₂
1,4-Dichlorobenzene-d₄
Naphthalene-d₈
Perylene-d₁₂
Phenanthrene-d₁₀

Surrogate Standards

CLP-LC-SS-1 1 x 1 mL
CLP-LC-SS-1-PAK 5 x 1 mL
2.0 mg/mL each in MeOH:CH₂Cl₂ (20:80) **SAVE** 5 comps.

2-Fluorobiphenyl
2-Fluorophenol
Nitrobenzene-d₅
Phenol-d₅
p-Terphenyl-d₁₄

CLP-LC-SS-2 1 x 1 mL
CLP-LC-SS-2-PAK 5 x 1 mL
6.0 mg/mL in MeOH **SAVE**
2,4,6-Tribromophenol

Buy AccuPAKs™
Save 20-40% 5 x 1 mL



CLP OLM 04.1 & 04.2 - Semi-Volatiles

Base Neutrals Mix #1

CLP-HC-SV-MIX1

2000 µg/mL each in CH₂Cl₂1 x 1 mL
13 comps.

Benzyl butyl phthalate
4-Bromophenyl phenyl ether
bis(2-Chloroethoxy)methane
bis(2-Chloroethyl) ether
bis(2-Chloro-1-methylethyl) ether
4-Chlorophenyl phenyl ether
Dibutyl phthalate

Diethyl phthalate
Dimethyl phthalate
Di-*n*-octyl phthalate
bis(2-Ethylhexyl)phthalate
N-Nitrosodiphenylamine
N-Nitrosodi-*n*-propylamine

CLP Base Neutral & PAH Mix #2

CLP-HC-SV-MIX2

2000 µg/mL each in CH₂Cl₂ : Benzene (75:25)1 x 1 mL
31 comps.

Acenaphthene
Acenaphthylene
Acetophenone
Anthracene
Atrazine
Benzaldehyde
Benz[a]anthracene
Benzo[b]fluoranthene
Benzo[k]fluoranthene
Benzo[g,h,i]perylene
Benzo[a]pyrene
Biphenyl
e-Caprolactam
Carbazole
2-Chloronaphthalene
Chrysene

Dibenz[a,h]anthracene
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno[1,2,3-cd]pyrene
Isophorone
Naphthalene
Nitrobenzene
Phenanthrene
Pyrene

CLP Toxic Substance Mix #4

CLP-HC-SV-MIX4

2000 µg/mL each in CH₂Cl₂1 x 1 mL
7 comps.

4-Chloroaniline
Dibenzofuran
3,3'-Dichlorobenzidine
2-Methylnaphthalene

2-Nitroaniline
3-Nitroaniline
4-Nitroaniline

CLP OLM 04.1 and 04.2 - Base Neutrals

CLP-HC-SVR-SET

3 x 1 mL
(CLP-HC-SV-MIX1, CLP-HC-SV-MIX2, CLP-HC-SV-MIX4)

Phenols

CLP-HC-A-R5

CLP-HC-A-R5-PAK

2000 µg/mL each in CH₂Cl₂

SAVE

1 x 1 mL
5 x 1 mL
14 comps.

4-Chloro-3-methylphenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2-Chlorophenol
2-Methyl-4,6-dinitrophenol
o-Cresol

p-Cresol
2-Nitrophenol
4-Nitrophenol
Pentachlorophenol
Phenol
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol

Base/Neutral Matrix Spike Solution

CLP-BN-MS

CLP-BN-MS-PAK

1000 µg/mL each in MeOH

SAVE

1 x 1 mL
5 x 1 mL
4 comps.

Acenaphthene
2,4-Dinitrotoluene

N-Nitrosodi-*n*-propylamine
Pyrene

Semi-Volatile Organic Extract Calibration

(Screening Mix)

CLP-009-10X

1.0 mg/mL each in CH₂Cl₂1 x 1 mL
3 comps.

Di-*n*-octylphthalate
Phenanthrene

Phenol

Instrument Performance Check Solution

CLP-033

CLP-033-PAK

0.25 mg/mL in CH₂Cl₂

SAVE

1 x 1 mL
5 x 1 mL

Decafluorotriphenylphosphine (DFTPP)

Acids

CLP-007-2

1.5 mg/mL each in MeOH

1 x 1 mL
5 comps.

2-Chlorophenol
4-Chloro-3-methylphenol
4-Nitrophenol

Pentachlorophenol
Phenol

Internal Standards Mixture

Z-014J

Z-014J-PAK

4.0 mg/mL each in CH₂Cl₂

SAVE

1 x 1 mL
5 x 1 mL
6 comps.

Acenaphthene-d₁₀
Chrysene-d₁₂
1,4-Dichlorobenzene-d₄

Naphthalene-d₈
Perylene-d₁₂
Phenanthrene-d₁₀

Semi-Volatile Surrogate Mixture

CLP-031-R

CLP-031-R-PAK

At stated conc. in MeOH:CH₂Cl₂ (50:50)

SAVE

1 x 1 mL
5 x 1 mL
8 comps.

2-Chlorophenol-d₄ (1.5 mg/mL)
1,2-Dichlorobenzene-d₄ (1.0 mg/mL)
2-Fluorobiphenyl (1.0 mg/mL)
2-Fluorophenol (1.5 mg/mL)

Nitrobenzene-d₅ (1.0 mg/mL)
Phenol-d₅ (1.5 mg/mL)
p-Terphenyl-d₁₄ (1.0 mg/mL)
2,4,6-Tribromophenol (1.5 mg/mL)

Pesticides Mixture

Z-014C-R

Z-014C-R-PAK

2.0 mg/mL each in Toluene:Hexane (50:50)

SAVE

1 x 1 mL
5 x 1 mL
20 comps.

Aldrin
α-BHC
β-BHC
γ-BHC
δ-BHC
α-Chlordane
γ-Chlordane

4,4'-DDD
4,4'-DDE
4,4'-DDT
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan sulfate

Endrin
Endrin aldehyde
Endrin ketone
Heptachlor
Heptachlor epoxide
Methoxychlor

Technical Note

Poor recoveries for endrin and DDT can result from injector port liner degradation. Try replacing the liner and seal. Most times this will correct the problem. Removing the first few inches of a capillary column can also help. Since elevated temperatures contribute to the breakdown problem, using a lower injection port temperature may improve this issue.

CLP Surrogate Spiking Solution

CLP-031-R-WL-25ML

CLP-031-R-WL-50ML

At stated conc. in MeOH

1 x 25 mL
1 x 50 mL
8 comps.

2-Chlorophenol-d₄ (150 µg/mL)
1,2-Dichlorobenzene-d₄ (100 µg/mL)
2-Fluorobiphenyl (100 µg/mL)
2-Fluorophenol (150 µg/mL)

Nitrobenzene-d₅ (100 µg/mL)
Phenol-d₅ (150 µg/mL)
p-Terphenyl-d₁₄ (100 µg/mL)
2,4,6-Tribromophenol (150 µg/mL)

Contract Laboratory Program (CLP)

Pesticide Mixtures

CLP

CLP - Pesticide Mixtures

CLP-018-10X 1 x 1 mL
CLP-018-10X-PAK 5 x 1 mL
At stated conc. in Isooctane 11 comps.

SAVE

Aldrin (1.0 µg/mL)	Endosulfan II (2.0 µg/mL)
γ-BHC (0.5 µg/mL)	Endrin aldehyde (2.5 µg/mL)
p,p'-DDT (2.0 µg/mL)	Heptachlor (1.0 µg/mL)
Dibutylchloredate (5.0 µg/mL)	Heptachlor epoxide (1.0 µg/mL)
Dieldrin (1.0 µg/mL)	Methoxychlor (10 µg/mL)
Endosulfan I (1.0 µg/mL)	

CLP-019-10X 1 x 1 mL
CLP-019-10X-PAK 5 x 1 mL
At stated conc. in Isooctane 12 comps.

SAVE

Aldrin (1.0 µg/mL)	p,p'-DDD (2.0 µg/mL)
α-BHC (0.5 µg/mL)	p,p'-DDE (1.0 µg/mL)
β-BHC (1.0 µg/mL)	Dibutylchloredate (5.0 µg/mL)
δ-BHC (1.0 µg/mL)	Endosulfan sulfate (2.0 µg/mL)
α-Chlordane (1.0 µg/mL)	Endrin (1.0 µg/mL)
γ-Chlordane (1.0 µg/mL)	Endrin ketone (2.0 µg/mL)

Pesticide Set

CLP-018/019-10X-SET 2 x 1 mL
 (CLP-018-10X, CLP-019-10X)

CLP - Pesticide Surrogates

CLP-032-R 1 x 1 mL
CLP-032-R-PAK 5 x 1 mL
200 µg/mL each in Acetone 2 comps.

SAVE

Decachlorobiphenyl	Tetrachloro- <i>m</i> -xylene
--------------------	-------------------------------

CLP-034 1 x 1 mL
CLP-034-PAK 5 x 1 mL
200 µg/mL each in Acetone 2 comps.

SAVE

Dibutylchloredate	Tetrachloro- <i>m</i> -xylene
-------------------	-------------------------------

CLP-PES-A 1 x 1 mL
CLP-PES-A-PAK 5 x 1 mL
200 µg/mL in Acetone

SAVE

CLP-PES-A-20X 1 x 1 mL
4000 µg/mL in Acetone

Dibutylchloredate

Pesticide Calibration Mixtures - Statement of Work 2/88 to 8/94

Working Level Pesticide Standard

At stated conc. (ng/mL) in Isooctane 11 comps.

Compound	Level 1	2	3	4	5
	CLP-023R	(-4X)	(-10X)	(-30X)	(-160X)
α-BHC	50	200	500	1,500	8,000
γ-BHC	50	200	500	1,500	8,000
p,p'-DDD	100	400	1,000	3,000	16,000
p,p'-DDT	100	400	1,000	3,000	16,000
Decachlorobiphenyl	100	400	1,000	3,000	16,000
Dieldrin	100	400	1,000	3,000	16,000
Endosulfan I	50	200	500	1,500	8,000
Endrin	100	400	1,000	3,000	16,000
Heptachlor	50	200	500	1,500	8,000
Methoxychlor	500	2,000	5,000	15,000	80,000
Tetrachloro- <i>m</i> -xylene	50	200	500	1,500	8,000

CLP-023R-CAL-SET 3 x 1 mL (Level 1, Level 2, Level 5)

Level 1	CLP-023R	1 mL
Level 2	CLP-023R-4X	1 mL
Level 3	CLP-023R-10X	1 mL
Level 4	CLP-023R-30X	1 mL
Level 5	CLP-023R-160X	1 mL

Level 2 Daily QC (for mid level curves)

CLP-023R-WL-4X-10ML 1 x 10 mL
CLP-023R-WL-4X-25ML 1 x 25 mL
CLP-023R-WL-4X-100ML 1 x 100 mL
At stated conc. in Isooctane 11 comps.

α-BHC (20 ng/mL)	Endosulfan I (20 ng/mL)
γ-BHC (20 ng/mL)	Endrin (40 ng/mL)
p,p'-DDD (40 ng/mL)	Heptachlor (20 ng/mL)
p,p'-DDT (40 ng/mL)	Methoxychlor (200 ng/mL)
Decachlorobiphenyl (40 ng/mL)	Tetrachloro- <i>m</i> -xylene (20 ng/mL)
Dieldrin (40 ng/mL)	

Ready-to-Inject

Working Level Pesticide Standard

At stated conc. (ng/mL) in Isooctane 13 comps.

Compound	Level 1	2	3	4	5
	CLP-024R	(-4X)	(-10X)	(-30X)	(-160X)
Aldrin	50	200	500	1,500	8,000
β-BHC	50	200	500	1,500	8,000
δ-BHC	50	200	500	1,500	8,000
α-Chlordane	50	200	500	1,500	8,000
γ-Chlordane	50	200	500	1,500	8,000
p,p'-DDE	100	400	1,000	3,000	16,000
Decachlorobiphenyl	100	400	1,000	3,000	16,000
Endosulfan II	100	400	1,000	3,000	16,000
Endosulfan sulfate	100	400	1,000	3,000	16,000
Endrin aldehyde	100	400	1,000	3,000	16,000
Endrin ketone	100	400	1,000	3,000	16,000
Heptachlor epoxide	50	200	500	1,500	8,000
Tetrachloro- <i>m</i> -xylene	50	200	500	1,500	8,000

CLP-024R-CAL-SET 3 x 1 mL (Level 1, Level 2, Level 5)

Level 1	CLP-024R	1 mL
Level 2	CLP-024R-4X	1 mL
Level 3	CLP-024R-10X	1 mL
Level 4	CLP-024R-30X	1 mL
Level 5	CLP-024R-160X	1 mL

Level 2 Daily QC (for mid level curves)

CLP-024R-WL-4X-10ML 1 x 10 mL
CLP-024R-WL-4X-25ML 1 x 25 mL
CLP-024R-WL-4X-100ML 1 x 100 mL
At stated conc. in Isooctane 13 comps.

Aldrin (20 ng/mL)	Endosulfan II (40 ng/mL)
β-BHC (20 ng/mL)	Endosulfan sulfate (40 ng/mL)
δ-BHC (20 ng/mL)	Endrin aldehyde (40 ng/mL)
α-Chlordane (20 ng/mL)	Endrin ketone (40 ng/mL)
γ-Chlordane (20 ng/mL)	Heptachlor epoxide (20 ng/mL)
p,p'-DDE (40 ng/mL)	Tetrachloro- <i>m</i> -xylene (20 ng/mL)
Decachlorobiphenyl (40 ng/mL)	

Pesticide Calibration Sets

CLP-023R/024R-SET 2 x 1 mL (CLP-023R, CLP-024R)	CLP-023R/024R-40X-SET 2 x 1 mL (CLP-023R-40X, CLP-024R-40X)
CLP-023R/024R-4X-SET 2 x 1 mL (CLP-023R-4X, CLP-024R-4X)	CLP-023R/024R-160X-SET 2 x 1 mL (CLP-023R-160X, CLP-024R-160X)

CLP - Pesticides

Evaluation Standard Mixture

CLP-017			1 x 1 mL
CLP-017-PAK		SAVE	5 x 1 mL
<i>At stated conc. in Isooctane</i>			
Aldrin	(1 µg/mL)	Dibutylchlorodate	(1 µg/mL)
4,4'-DDT	(2 µg/mL)	Endrin	(2 µg/mL)

Florisil Cartridge Check Solution

CLP-FC			1 x 1 mL
CLP-FC-PAK		SAVE	5 x 1 mL
<i>100 µg/mL in Acetone</i>			
2,4,5-Trichlorophenol			

Pesticide Matrix Spiking Solutions

CLP-026-R2			1 x 1 mL
CLP-026-R2-PAK		SAVE	5 x 1 mL
<i>At stated conc. in Acetone</i>			
Aldrin	(5 µg/mL)	Dieldrin	(10 µg/mL)
γ-BHC	(5 µg/mL)	Endrin	(10 µg/mL)
4,4'-DDT	(10 µg/mL)	Heptachlor	(5 µg/mL)

CLP-026-R2-10X			1 x 1 mL
CLP-026-R2-10X-PAK		SAVE	5 x 1 mL
<i>At stated conc. in Acetone</i>			
Aldrin	(50 µg/mL)	Dieldrin	(100 µg/mL)
γ-BHC	(50 µg/mL)	Endrin	(100 µg/mL)
4,4'-DDT	(100 µg/mL)	Heptachlor	(50 µg/mL)

Pesticide Matrix Spiking Solution

CLP-026-R2-WL			1 x 1 mL
CLP-026-R2-WL-25ML			1 x 25 mL
CLP-026-R2-WL-50ML			1 x 50 mL
<i>At stated conc. in Acetone</i>			
Aldrin	(0.5 µg/mL)	Dieldrin	(1.0 µg/mL)
γ-BHC	(0.5 µg/mL)	Endrin	(1.0 µg/mL)
4,4'-DDT	(1.0 µg/mL)	Heptachlor	(0.5 µg/mL)

Resolution Check Solution

CLP-028-WL			1 x 1 mL
CLP-028-WL-10ML			1 x 10 mL
<i>At stated conc. in Isooctane</i>			
γ-Chlordane	(10 ng/mL)	Endosulfan sulfate	(20 ng/mL)
Endosulfan I	(10 ng/mL)	Endrin ketone	(20 ng/mL)
p,p'-DDE	(20 ng/mL)	Methoxychlor	(100 ng/mL)
Decachlorobiphenyl	(20 ng/mL)	Tetrachloro- <i>m</i> -xylene	(20 ng/mL)
Dieldrin	(20 ng/mL)		

High Conc. Pesticide Matrix Spiking Solutions

For Water			
CLP-014-1000X			1 x 1 mL
CLP-014-1000X-PAK		SAVE	5 x 1 mL
<i>At stated conc. in MeOH</i>			
Aldrin	(200 µg/mL)	Endrin	(500 µg/mL)
4,4'-DDT	(500 µg/mL)	Heptachlor	(200 µg/mL)
Dieldrin	(500 µg/mL)	Lindane	(200 µg/mL)

For Soil/Sediment

CLP-016-1000X			1 x 1 mL
CLP-016-1000X-PAK		SAVE	5 x 1 mL
<i>At stated conc. in MeOH</i>			
Aldrin	(2,000 µg/mL)	Endrin	(5,000 µg/mL)
4,4'-DDT	(5,000 µg/mL)	Heptachlor	(2,000 µg/mL)
Dieldrin	(5,000 µg/mL)	Lindane	(2,000 µg/mL)

Laboratory Control Sample Spiking Solution

CLP-LCS-P-1000X			1 x 1 mL
CLP-LCS-P-1000X-PAK		SAVE	5 x 1 mL
<i>At stated conc. in Acetone</i>			
γ-BHC	(100 µg/mL)	Endosulfan sulfate	(200 µg/mL)
γ-Chlordane	(100 µg/mL)	Endrin	(200 µg/mL)
Dieldrin	(200 µg/mL)	Heptachlor epoxide	(100 µg/mL)
4,4'-DDE	(200 µg/mL)		

Performance Evaluation Solution

CLP-025-WL			1 x 1 mL
CLP-025-WL-10ML			1 x 10 mL
<i>At stated conc. in Isooctane</i>			
α-BHC	(10 ng/mL)	Decachlorobiphenyl	(20 ng/mL)
β-BHC	(10 ng/mL)	Endrin	(50 ng/mL)
γ-BHC	(10 ng/mL)	Methoxychlor	(250 ng/mL)
4,4'-DDT	(100 ng/mL)	Tetrachloro- <i>m</i> -xylene	(20 ng/mL)

PREP NOTES

The addition of 1 mL of surrogate spiking mixture to each sample is sufficient to check the extraction efficiency.

Pesticide Surrogate Mixtures

CLP-032R-WL-0.2X-10ML		1 x 10 mL
CLP-032R-WL-0.2X-50ML		1 x 50 mL
CLP-032R-WL-0.2X-100ML		1 x 100 mL
<i>0.2 µg/mL each in Acetone</i>		
Decachlorobiphenyl		Tetrachloro- <i>m</i> -xylene

Pesticide and PCBs

Performance Evaluation Solution

CLP-025			1 x 1 mL
CLP-025-PAK		SAVE	5 x 1 mL
<i>At stated conc. in Isooctane</i>			
α-BHC	(100 ng/mL)	Decachlorobiphenyl	(200 ng/mL)
β-BHC	(100 ng/mL)	Endrin	(500 ng/mL)
γ-BHC	(100 ng/mL)	Methoxychlor	(2500 ng/mL)
4,4'-DDT	(1000 ng/mL)	Tetrachloro- <i>m</i> -xylene	(200 ng/mL)

Resolution Mixture

CLP-028			1 x 1 mL
CLP-028-PAK		SAVE	5 x 1 mL
<i>At stated conc. in Isooctane</i>			
γ-Chlordane	(100 ng/mL)	Dieldrin	(200 ng/mL)
Endosulfan I	(100 ng/mL)	Endosulfan sulfate	(200 ng/mL)
p,p'-DDE	(200 ng/mL)	Endrin ketone	(200 ng/mL)
Decachlorobiphenyl	(200 ng/mL)	Methoxychlor	(1000 ng/mL)
		Tetrachloro- <i>m</i> -xylene	(200 ng/mL)

Polychlorinated Biphenyls, Chlordane & Toxaphene

Aroclors #	Cat. No.	1 mL	Cat. No. (5 x 1 mL)	PAK
Aroclor 1016	C-216S-H-10X		C-216S-H-10X-PAK	
Aroclor 1221	C-221S-H-10X		C-221S-H-10X-PAK	
Aroclor 1232	C-232S-H-10X		C-232S-H-10X-PAK	
Aroclor 1242	C-242S-H-10X		C-242S-H-10X-PAK	
Aroclor 1248	C-248S-H-10X		C-248S-H-10X-PAK	
Aroclor 1254	C-254S-H-10X		C-254S-H-10X-PAK	
Aroclor 1260	C-260S-H-10X		C-260S-H-10X-PAK	
Aroclor 1262	C-262S-H-10X		C-262S-H-10X-PAK	
Aroclor 1268	C-268S-H-10X		C-268S-H-10X-PAK	
Pesticides				
Chlordane	P-017S-H-10X		P-017S-H-10X-PAK	
Toxaphene	P-093S-H-10X		P-093S-H-10X-PAK	

Aroclors at Working Levels

Aroclors 1016/1260 with Surrogates

CLP-216/260-WL	1 x 1 mL
CLP-216/260-WL-5ML	1 x 5 mL
CLP-216/260-WL-10ML	1 x 10 mL
At stated conc. in Isooctane	4 comps.

Aroclor 1016	(100 ng/mL)	Decachlorobiphenyl	(20 ng/mL)
Aroclor 1260	(100 ng/mL)	Tetrachloro- <i>m</i> -xylene	(20 ng/mL)

Aroclor 1221 with Surrogates

CLP-221-WL	1 x 1 mL
CLP-221-WL-5ML	1 x 5 mL
CLP-221-WL-10ML	1 x 10 mL
At stated conc. in Isooctane	3 comps.

Aroclor 1221	(200 ng/mL)	Tetrachloro- <i>m</i> -xylene	(20 ng/mL)
Decachlorobiphenyl	(20 ng/mL)		

Aroclor 1232 with Surrogates

CLP-232-WL	1 x 1 mL
CLP-232-WL-5ML	1 x 5 mL
CLP-232-WL-10ML	1 x 10 mL
At stated conc. in Isooctane	3 comps.

Aroclor 1232	(100 ng/mL)	Tetrachloro- <i>m</i> -xylene	(20 ng/mL)
Decachlorobiphenyl	(20 ng/mL)		

Aroclor 1242 with Surrogates

CLP-242-WL	1 x 1 mL
CLP-242-WL-5ML	1 x 5 mL
CLP-242-WL-10ML	1 x 10 mL
At stated conc. in Isooctane	3 comps.

Aroclor 1242	(100 ng/mL)	Tetrachloro- <i>m</i> -xylene	(20 ng/mL)
Decachlorobiphenyl	(20 ng/mL)		

Aroclor 1248 with Surrogates

CLP-248-WL	1 x 1 mL
CLP-248-WL-5ML	1 x 5 mL
CLP-248-WL-10ML	1 x 10 mL
At stated conc. in Isooctane	3 comps.

Aroclor 1248	(100 ng/mL)	Tetrachloro- <i>m</i> -xylene	(20 ng/mL)
Decachlorobiphenyl	(20 ng/mL)		

Aroclor 1254 with Surrogates

CLP-254-WL	1 x 1 mL
CLP-254-WL-5ML	1 x 5 mL
CLP-254-WL-10ML	1 x 10 mL
At stated conc. in Isooctane	3 comps.

Aroclor 1254	(100 ng/mL)	Tetrachloro- <i>m</i> -xylene	(20 ng/mL)
Decachlorobiphenyl	(20 ng/mL)		

Toxaphene with Surrogates

P-093-WL-10X	1 x 1 mL
P-093-WL-10X-5ML	1 x 5 mL
P-093-WL-10X-10ML	1 x 10 mL
At stated conc. in Isooctane	3 comps.

Toxaphene	(500 ng/mL)	Tetrachloro- <i>m</i> -xylene	(20 ng/mL)
Decachlorobiphenyl	(20 ng/mL)		



Technical Note

The profiles of some Aroclor products may not always look the same, but the percent total chlorine by weight will be identical.

Sample Clean-up Solutions at Working Levels

GPC Calibration Solution

CLP-027-WL-10ML	1 x 10 mL
At stated conc. in CH ₂ Cl ₂	5 comps.

Corn Oil	(25 mg/mL)	Perylene	(0.02 mg/mL)
bis(2-Ethylhexyl)phthalate	(1.0 mg/mL)	Sulfur	(0.08 mg/mL)
Methoxychlor	(0.2 mg/mL)		

GPC Calibration Solution for 8/94 SOW OLM03.1

CLP-027-R2-WL-10ML	1 x 10 mL
At stated conc. in CH ₂ Cl ₂	5 comps.

Corn Oil	(25 mg/mL)	Perylene	(0.02 mg/mL)
bis(2-Ethylhexyl)phthalate	(0.5 mg/mL)	Sulfur	(0.08 mg/mL)
Methoxychlor	(0.1 mg/mL)		

AccuStandard provides the solutions to meet sample clean-up parameters!

Florisil Cartridge Check Solution

CLP-FC-WL-10ML	1 x 10 mL
0.1 µg/mL in Acetone	

2,4,5-Trichlorophenol

GPC Calibration Check Solutions

GPC-CC-A-WL-10ML	1 x 10 mL
At stated conc. in CH ₂ Cl ₂	6 comps.

Aldrin	(0.1 µg/mL)	Dieldrin	(0.2 µg/mL)
γ-BHC (Lindane)	(0.1 µg/mL)	Endrin	(0.2 µg/mL)
4,4'-DDT	(0.2 µg/mL)	Heptachlor	(0.1 µg/mL)

GPC-CC-B-WL-10ML	1 x 10 mL
0.2 µg/mL each in CH ₂ Cl ₂	2 comps.

Aroclor 1016	Aroclor 1260
--------------	--------------

Labels, Safety, Storage and Packaging

All organic solutions are in 2 mL Ampules, filled to approximately 1.2 mL to ensure 1 mL can be transferred.

2-Part Label System

Smudgeproof, tear and solvent resistant * (Organic products in ampules)

Part One can be placed into a laboratory journal to document the standard used for the analysis. This label section includes the catalog number, description, lot number, expiration date, safety information, proper storage conditions and documents AccuStandard as the manufacturer.

Part Two duplicates required information for labeling transfer vial(s) with correct information.

* Includes the most common solvents:
Methylene chloride, Methanol and Acetone



Usage, Handling and Storage

Amber ampules are used to insure the integrity of the contents. The ampule contains at least 120% of the stated volume of a solution, allowing easy transfer. Transfer the required amount using a pipet or clean gastight syringe. Excess solution can be stored in a tightly capped vial.

Expiration dates are determined by short-term and long-term stability studies, experience and knowledge of chemical interactions. As part of our long-term studies, standards are analyzed at the end of their assigned period and sometimes can be recertified for an additional length of time.

All products come with storage conditions listed on the label of the ampule or bottle. Some chemical formulations require refrigeration or freezer storage to inhibit adverse reactions among the components. It is imperative that these conditions are followed to preserve the integrity of the material.

GHS Symbols



- Acute Toxicity (fatal or toxic)

GHS-06



GHS-02

- Flammables
- Self Reactives
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Organic Peroxides



GHS-05

- Corrosives
- Skin corrosion/burns
- Eye Damage
- Corrosive to Metals



GHS-07

- Irritant
- Skin Sensitizer
- Acute toxicity (harmful)
- Narcotic Effects
- Respiratory Tract Irritant



GHS-03

- Oxidizers



GHS-08

- Carcinogen
- Respiratory Sensitizer
- Reproductive Toxicity
- Mutagenicity
- Aspiration Toxicity

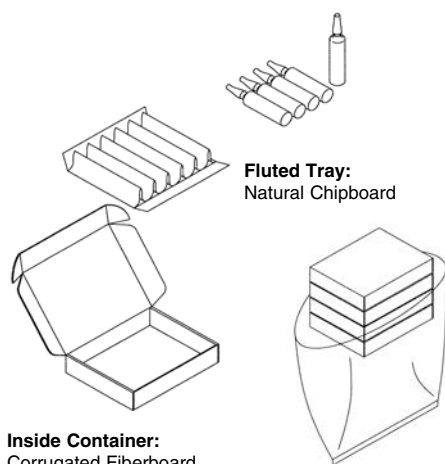


GHS-09

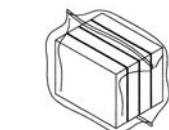
- Aquatic Toxicity

AccuStandard uses recyclable and biogradable material

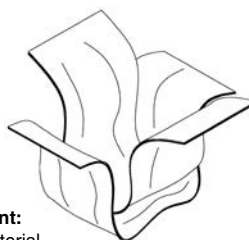
Package compliant with DOT and International regulations.



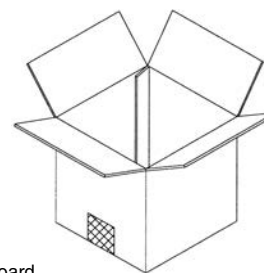
Fluted Tray:
Natural Chipboard



Cushioning/Absorbent:
Natural Kraft Fiber Material



Shipping Container:
Natural Kraft Corrugated Fiberboard



Inside Container:
Corrugated Fiberboard

Standard Mixtures for EPA 500 Series

For Drinking Water



Background Information

In 1974 the Safe Drinking Water Act was passed by the US Congress. Under the Act the USEPA established national standards for drinking water from both surface and ground water sources. The EPA 500 Series Methods have evolved from the passage of the Clean Water Act, and from several amendments to the original Act.

The 500 Series product line contains standards used in proposed and promulgated methods for the identification and quantification of organic compounds in drinking water. The organic compounds listed in the various methods include volatile organic compounds (VOCs), pesticides, synthetic organic compounds (SOCs), and trihalomethane disinfection by-products.

Analytical techniques used in the identification and quantification include gas chromatography with selective detectors (PID, ELCD, ECD, FID, NPD, FPD), gas chromatography/mass spectrometry (GC/MS) and high performance liquid chromatography (HPLC).

Complete analysis of the target compounds with these 500 Series Methods can be accomplished by using the series of standards formulated by AccuStandard for each method along with the required internal and surrogate standards.

For your convenience we offer either large mixes containing all the target analytes, or smaller sub-mixes at higher concentrations to allow for flexibility in your analysis.

Match frequently requested products.

Alternate Source

ASL products can be used as an independent second source.

Methods 502, 505, 508.1, 525.2

**Thousands of Standards,
just a click away**



AccuStandard.com

Method #	Method Description	Pages
501	Trihalomethanes (ECD or PID/ELCD)	141
502.2	Volatiles (PID/ELCD) & Volatile Surrogates & Internal Standards	142-145
503.1	VOC - Aromatics & Alkenes (PID/ELCD)	146
504	EDB & DBCP (ECD)	146
504.1	EDB, DBCP, TCP (ECD)	146
505	Organohalide Pesticides & Aroclors (ECD)	146
506	Phthalate Esters	146
507	Nitrogen/Phosphorous Pesticides (NPD)	147
508 & 508.A	Chlorinated Pesticides & Aroclors (ECD)	148
508.1	Chlorinated Pesticides, Herbicides & Organo-halides (ECD)	149
509	Ethylene thiourea (ECD)	149
515.1 & 515.2	Chlorinated Pesticides (ECD)	150
515.3 & 515.4	Chlorinated Acids (ECD)	151
521	Nitrosamines (SPE & Capillary Column GC)	152
524.2	Volatiles (GC/MS)	152
524.3	Purgeable Organic Compounds (GC/MS)	152
525.1	Semi-Volatiles, PCB Congeners, Chlorinated Pesticides (GC/MS)	153
525.2	Semi-Volatiles, PCB Congeners, Pesticides (GC/MS)	154-156
526	Semi-Volatiles (GC/MS)	157
527	Pesticides & Flame Retardants (SPE & Capillary GC/MS)	157
528	Phenols (GC/MS)	158
529	Explosives & Related Compounds (SPE & Capillary GC/MS)	158
531 & 531.1	Carbamates (HPLC)	159
532	Phenylureas (HPLC)	159
535	Acetamide-Herbicide Degradates (LCMS)	159
547	Glyphosate (HPLC)	160
548	Endothall (ECD)	160
548.1	Endothall (GC/MS)	160
549.1/549.2	Diquat & Paraquat (HPLC)	160
550 & 550.1	Polynuclear Aromatic Hydrocarbons (HPLC)	160
551	Chlorinated Solvents, also Trihalomethanes (ECD)	160
551.1A	Disinfection By-products (ECD)	161
552 & 552.1	Haloacetic Acids (ECD)	162
552.2	Haloacetic Acids & Dalapon (ECD)	163
553	Benzidines & Nitrogen Pesticides (HPLC/MS)	164
554	Derivatized Carbonyl Compounds (HPLC)	164
555	Chlorinated Pesticides (HPLC)	164
556 & 556.1	Carbonyl Compounds (GC/ECD)	164
	National Primary Drinking Water Standards	166-167
	EPA Consent Decree Water Protocol	168
	Hazardous Substances List	141

EPA Hazardous Substances List (Volatiles)

HSL Volatiles Standard Mixture

M-HSL *
2.0 mg/mL each in MeOH

Acetone
2-Butanone
Carbon disulfide
2-Hexanone

4-Methyl-2-pentanone
Styrene
Vinyl acetate
o-Xylene

1 x 1 mL
8 comps.

* ColdPAK required to maintain integrity of product.

Method 501 Trihalomethane Analysis by P&T-GC/ECD or PID

Trihalomethanes

M-501
M-501-PAK
0.2 mg/mL each in MeOH
M-501-SET

M-501-10X
M-501-10X-PAK
2.0 mg/mL each in MeOH

Bromoform
Chloroform

SAVE

SAVE

Dibromochloromethane
Dichlorobromomethane

1 x 1 mL
5 x 1 mL
4 comps.

set of 5 x 1 mL

1 x 1 mL
5 x 1 mL
4 comps.



EPA Method 500 Series

Method 502.2 Volatile Organic Compounds by PID/ELCD

The following solutions represent a breakdown of Method 502 components into groups containing liquid and gaseous components:

54 Liquid Components

Benzene (01)	1,2-Dibromo-3-chloropropane (18)	1,1-Dichloropropene (33)	Toluene (46)
Bromobenzene (02)	1,2-Dibromoethane (19)	<i>cis</i> -1,3-Dichloropropene (34A) *	1,2,3-Trichlorobenzene (47)
Bromochloromethane (03)	Dibromomethane (20)	<i>trans</i> -1,3-Dichloropropene (34B) **	1,2,4-Trichlorobenzene (48)
Bromodichloromethane (04)	1,2-Dichlorobenzene (21)	Ethylbenzene (35)	1,1,1-Trichloroethane (49)
Bromoform (05)	1,3-Dichlorobenzene (22)	Hexachlorobutadiene (36)	1,1,2-Trichloroethane (50)
<i>n</i> -Butylbenzene (07)	1,4-Dichlorobenzene (23)	Isopropylbenzene (<i>Cumene</i>) (37)	Trichloroethene (51)
<i>sec</i> -Butylbenzene (08)	1,1-Dichloroethane (25)	<i>p</i> -Isopropyltoluene (<i>p-Cymene</i>) (38)	1,2,3-Trichloropropane (53)
<i>tert</i> -Butylbenzene (09)	1,2-Dichloroethane (26)	Methylene chloride (39)	1,2,4-Trimethylbenzene (54)
Carbon tetrachloride (10)	1,1-Dichloroethene (27)	Naphthalene (40)	1,3,5-Trimethylbenzene (55)
Chlorobenzene (11)	<i>cis</i> -1,2-Dichloroethene (28)	<i>n</i> -Propylbenzene (41)	<i>o</i> -Xylene (57)
Chloroform (13)	<i>trans</i> -1,2-Dichloroethene (29)	Styrene (42)	<i>m</i> -Xylene (58)
2-Chlorotoluene (15)	1,2-Dichloropropane (30)	1,1,1,2-Tetrachloroethane (43)	<i>p</i> -Xylene (59)
4-Chlorotoluene (16)	1,3-Dichloropropane (31)	1,1,2,2-Tetrachloroethane (44)	
Dibromochloromethane (17)	2,2-Dichloropropane (32)	Tetrachloroethene (45)	
			* <i>cis</i> (1.06 x conc.) (34A)
			** <i>trans</i> (0.94 x conc.) (34B)

6 Gas Components

Bromomethane (06)	Dichlorodifluoromethane (24)
Chloroethane (12)	Trichlorofluoromethane (52)
Chloromethane (14)	Vinyl chloride (56)

54 Liquid Components

M-502A-R	0.2 mg/mL each in MeOH	1 x 1 mL
M-502A-R-PAK	0.2 mg/mL each in MeOH SAVE	5 x 1 mL
M-502A-R-10X	2.0 mg/mL each in MeOH	1 x 1 mL
M-502A-R-10X-PAK	2.0 mg/mL each in MeOH SAVE	5 x 1 mL

6 Gas Components

M-502B	0.2 mg/mL each in MeOH	1 x 1 mL
M-502B-PAK	0.2 mg/mL each in MeOH SAVE	5 x 1 mL
M-502B-10X	2.0 mg/mL each in MeOH	1 x 1 mL
M-502B-10X-PAK	2.0 mg/mL each in MeOH SAVE	5 x 1 mL

54 Liquid and 6 Gas Component Sets

M-502A-R/B-SET	2 x 1 mL
0.2 mg/mL each in MeOH	(M-502A-R, M-502B)
M-502A-R/B-10X-SET	2 x 1 mL
2.0 mg/mL each in MeOH	(M-502A-R-10X, M-502B-10X)

Internal & Surrogate Standard

M-502-IS/SS	1 x 1 mL
M-502-IS/SS-PAK	SAVE 5 x 1 mL
2.0 mg/mL each in MeOH	4 comps.

1-Chloro-3-fluorobenzene	Fluorobenzene
2-Chloropropane	α,α,α -Trifluorotoluene

Technical Note

M-502-IS/SS is useful for DB-624/VRX analysis by GC/ELCD/PID. 2-Chloropropane has been included in the standard to be used as an early eluting Internal Standard. The use of this Internal Standard aids in quantitating the gaseous components in purgeable volatiles.

Internal/Surrogate Standard

M-502-IS-ASL	1 x 1 mL
M-502-IS-ASL-PAK	SAVE 5 x 1 mL
2.0 mg/mL each in MeOH	2 comps.
2-Bromo-1-chloropropane	1-Chloro-2-fluorobenzene

o,m,p-Xylenes Mix

M-502-60	0.2 mg/mL in MeOH	1 x 1 mL
M-502-60-10X	2.0 mg/mL in MeOH	1 x 1 mL
		3 comps.
<i>o</i> -Xylene (57)	<i>p</i> -Xylene (59)	
<i>m</i> -Xylene (58)		

Technical Note

Solutions containing volatile components (such as gases) should be chilled before opening to ensure gases are in the solution. In order to maintain high quality standards, any transferred volume should have minimal headspace and PTFE septa caps should be replaced often if pierced.

All 60 liquid & gas components in One Solution

Liquids (54 comps.) and Gases (6 comps.)

M-502	1 x 1 mL
M-502-PAK	SAVE 5 x 1 mL
0.2 mg/mL each in MeOH	60 comps.
M-502-10X	1 x 1 mL
M-502-10X-PAK	SAVE 5 x 1 mL
2.0 mg/mL each in MeOH	60 comps.

Liquids (54 comps.) & Gases (6 comps.) plus MtBE

M-502-R1	1 x 1 mL (liquid and gases)
M-502-R1-PAK	SAVE 5 x 1 mL (liquid and gases)
0.2 mg/mL each in MeOH	61 comps.

Liquids (54 comps.) plus MtBE

M-502A-R3	1 x 1 mL
0.2 mg/mL each in MeOH	
M-502A-R3-10X	1 x 1 mL
2.0 mg/mL each in MeOH	55 comps.

59 Component Set

As a complete set of each component in individual ampules.

M-502-SET	0.2 mg/mL in MeOH	59 x 1 mL
M-502-10X-SET	2.0 mg/mL in MeOH	59 x 1 mL

Individual Component Solutions

To order, specify identity (#) and conc. (0.2 or 2.0 mg/mL)

M-502-#	0.2 mg/mL in MeOH	1 x 1 mL
M-502-#-10X	2.0 mg/mL in MeOH	1 x 1 mL

M-502-34A & M-502-34B only available as mixture: M-502-34R

M-502-34-R	1 x 1 mL
0.4 mg/mL each in MeOH	
M-502-34-R-10X	1 x 1 mL
4.0 mg/mL each in MeOH	2 comps.

cis-1,3-Dichloropropene

trans-1,3-Dichloropropene

Individual Component Neats

To order, specify identity

M-502-#N	1 x 1 gram
except,	

1 x 1 gram

1 x 1 gram

M-502-04N	M-502-31N
M-502-08N	M-502-32N
M-502-17N	M-502-34N
M-502-18N	M-502-43N
M-502-28N	M-502-44N
M-502-29N	

M-502-49N



Method 502.2 (Continued) VOCs by PID/ELCD

The following solutions represent an alternate source formulation of Method 502/524 components based on similar volatility groups.

M-502-K1-SET (M-502B-10X, M-502C-02, M-502C-03, M-502C-04, M-502C-05, M-502C-06)			
			6 x 1 mL
M-502B-10X M-502B-10X-PAK 2.0 mg/mL each in MeOH	Alternate Source	SAVE	1 x 1 mL 5 x 1 mL 6 comps.
Bromomethane Chloroethane Chloromethane	Dichlorodifluoromethane Trichlorofluoromethane Vinyl chloride		
M-502C-02 M-502C-02-PAK 2.0 mg/mL each in MeOH	Alternate Source	SAVE	1 x 1 mL 5 x 1 mL 6 comps.
Bromodichloromethane Dibromochloromethane 1,1-Dichloroethylene	cis-1,2-Dichloroethylene trans-1,2-Dichloroethylene Methylene chloride		
M-502C-03 M-502C-03-PAK 2.0 mg/mL each in MeOH	Alternate Source	SAVE	1 x 1 mL 5 x 1 mL 9 comps.
Bromochloromethane Bromoform Carbon tetrachloride Chloroform Dibromomethane	1,1-Dichloroethane 2,2-Dichloropropane Tetrachloroethylene 1,1,1-Trichloroethane		
M-502C-04 M-502C-04-PAK 2.0 mg/mL each in MeOH	Alternate Source	SAVE	1 x 1 mL 5 x 1 mL 14 comps.
1,2-Dibromo-3-chloropropane 1,2-Dibromoethane 1,2-Dichloroethane 1,2-Dichloropropane 1,3-Dichloropropane 1,1-Dichloropropylene cis-1,3-Dichloropropene * trans-1,3-Dichloropropene **	Hexachlorobutadiene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane Trichloroethylene 1,2,3-Trichloropropane * cis (1.06 x conc.) ** trans (0.94 x conc.)		
M-502C-05 M-502C-05-PAK 2.0 mg/mL each in MeOH	Alternate Source	SAVE	1 x 1 mL 5 x 1 mL 13 comps.
Benzene Bromobenzene n-Butylbenzene Ethylbenzene p-Isopropyltoluene Naphthalene Styrene	Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene m-Xylene		
M-502C-06 M-502C-06-PAK 2.0 mg/mL each in MeOH	Alternate Source	SAVE	1 x 1 mL 5 x 1 mL 12 comps.
sec-Butylbenzene tert-Butylbenzene Chlorobenzene 2-Chlorotoluene 4-Chlorotoluene 1,2-Dichlorobenzene	1,3-Dichlorobenzene 1,4-Dichlorobenzene Isopropylbenzene n-Propylbenzene o-Xylene p-Xylene		

Method 502.2 Volatile Organic Mixtures

Custom Unregulated VOC's

M-502C-09

2.0 mg/mL each in MeOH

1 x 1 mL
39 comps.

Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane n-Butylbenzene sec-Butylbenzene tert-Butylbenzene Chloroethane Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene Dibromochloromethane Dibromomethane 1,3-Dichlorobenzene Dichlorodifluoromethane 1,1-Dichloroethane 1,2-Dichloropropane 1,3-Dichloropropane 2,2-Dichloropropane	1,1-Dichloropropene cis-1,3-Dichloropropene * trans-1,3-Dichloropropene ** Hexachlorobutadiene Isopropylbenzene (Cumene) p-Isopropyltoluene (p-Cymene) Dichloromethane (Methylene chloride) Naphthalene n-Propylbenzene 1,1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,1,2-Trichloroethane Trichlorofluoromethane 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene (Mesitylene) * cis (1.06 x conc.) ** trans (0.94 x conc.)
--	--

Wisconsin DNR VOC Mixture

S-989

2.0 mg/mL each in MeOH

1 x 1 mL
52 comps.

Benzene Bromobenzene Bromodichloromethane n-Butylbenzene sec-Butylbenzene tert-Butylbenzene Carbon tetrachloride Chlorobenzene Chlorodibromomethane Chloroethane Chloroform Chloromethane 2-Chlorotoluene 4-Chlorotoluene 1,2-Dibromo-3-chloropropane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Dichlorodifluoromethane 1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane	1,3-Dichloropropane 2,2-Dichloropropane Diisopropyl ether Ethylbenzene Hexachlorobutadiene Isopropylbenzene p-Isopropyltoluene Methylene chloride Methyl tert-butyl ether Naphthalene n-Propylbenzene 1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene 1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene 1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene Trichlorofluoromethane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene Vinyl chloride o-Xylene m-Xylene p-Xylene
---	---

Match frequently requested products

Alternate Source

ASL products can be used as an independent second source



EPA Method 500 Series

Method 502.2 (continued) Volatile Organic Compounds

The solutions below have been designed in cooperation with laboratories in the Contract Laboratory Program and have proven useful in this particular configuration for the separation and quantitation of all of the 60 components on a single column.

M-502D/E/F-SET

set of 3 x 1 mL
(set includes M-502D, M-502E and M-502F)

Mix D

M-502D

0.2 mg/mL each in MeOH

1 x 1 mL
26 comps.

Benzene	Dichlorodifluoromethane
Bromobenzene	2,2-Dichloropropane
Bromochloromethane	Ethyl benzene
Bromoform	Ethylene dibromide
sec-Butyl benzene	Isopropylbenzene
Carbon tetrachloride	Tetrachloroethene
Chloroethane	1,1,1,2-Tetrachloroethane
4-Chlorotoluene	Toluene
Dibromomethane	1,2,3-Trichlorobenzene
1,2-Dichlorobenzene	1,2,4-Trichlorobenzene
1,4-Dichlorobenzene	Trichloroethene
1,1-Dichloroethene	Vinyl chloride
trans-1,2-Dichloroethene	o-Xylene

Mix E

M-502E

0.2 mg/mL each in MeOH

1 x 1 mL
21 comps.

Bromomethane	Hexachlorobutadiene
Chlorobenzene	Methylene chloride
Chloromethane	1,1,1-Trichloroethane
2-Chlorotoluene	1,1,2-Trichloroethane
Dibromochloromethane	Trichlorofluoromethane
1,3-Dichlorobenzene	Styrene
1,1-Dichloroethane	1,2,3-Trichloropropane
1,2-Dichloroethane	1,2,4-Trimethylbenzene
cis-1,2-Dichloroethene	m-Xylene
1,2-Dichloropropane	
cis-1,3-Dichloropropene*	* cis (1.06 x conc.)
trans-1,3-Dichloropropene**	** trans (0.94 x conc.)

Mix F

M-502F

0.2 mg/mL each in MeOH

1 x 1 mL
13 comps.

Bromodichloromethane	p-Isopropyl toluene
n-Butyl benzene	Naphthalene
tert-Butyl benzene	n-Propyl benzene
Chloroform	1,1,2,2-Tetrachloroethane
1,2-Dibromo-3-chloropropane	1,3,5-Trimethyl benzene
1,3-Dichloropropane	p-Xylene
1,1-Dichloropropene	

Mixtures of Internal, Surrogate Standards & Fortification Solutions

Internal Standard

M-502-IS

M-502-IS-PAK

2.0 mg/mL each in MeOH

SAVE

1 x 1 mL
5 x 1 mL
2 comps.

1-Chloro-2-bromopropane

Fluorobenzene

Internal Standard 2

M-502-IS-2

M-502-IS-2-PAK

2.0 mg/mL each in MeOH

SAVE

1 x 1 mL
5 x 1 mL
3 comps.

1-Chloro-2-bromopropane

Methylene chloride-d₂

Fluorobenzene

Internal Standard 3

M-502-IS-2-3

2.0 mg/mL in MeOH

1 x 1 mL

Methylene chloride-d₂

Internal Standard

M-524-IS

M-524-IS-PAK

2.0 mg/mL each in MeOH

SAVE

1 x 1 mL
5 x 1 mL
2 comps.

1,2-Dichlorobenzene-d₄

Fluorobenzene

Internal Standard 2

M-524-IS-2

M-524-IS-2-PAK

2.0 mg/mL in MeOH

SAVE

1 x 1 mL
5 x 1 mL

Fluorobenzene

Fortification Solution

M-524-FS

M-524-FS-PAK

2.0 mg/mL each in MeOH

SAVE

1 x 1 mL
5 x 1 mL
3 comps.

4-Bromofluorobenzene

Fluorobenzene

1,2-Dichlorobenzene-d₄

Surrogate Standard

M-524-SS

M-524-SS-PAK

2.0 mg/mL each in MeOH

SAVE

1 x 1 mL
5 x 1 mL
2 comps.

4-Bromofluorobenzene

1,2-Dichlorobenzene-d₄

Technical Note

Special Considerations for Volatile Analytes

Volatile Analytes, especially gases, can be troublesome to analyze. To provide the best possible standard we suggest the following procedures:

1. Keep the ampules cool (follow the storage conditions on the label).
2. Prior to use, invert the ampule several times to ensure the gases are in the solution, not in the headspace. Mixing too vigorously can cause the gases to be lost as well.
3. Use freshly opened ampules whenever possible.
4. When transferring, take care to avoid losses of the very volatile components. For example, holding the barrel of a syringe in your hand can warm it enough to lose some of the most volatile components.
5. If using the purge and trap (PT) system is giving questionable results, try a direct liquid injection. If the results are not as expected, there may be a problem with the PT apparatus.



Method 502.2 Internal and Surrogate Standards

With more proposed and promulgated methods available, analytical chemists are trying to combine analyte lists and shorten run-time while still demonstrating method equivalence. AccuStandard has formulated a core evaluation deuterated solution, and a second conventional internal/surrogate evaluation solution. Use of these formulations allows the analyst to quickly evaluate new ISTD/SS combinations for PID, Hall, FID or GC/MS applications.

Popular Internal Standards

M-502-IS 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

1-Chloro-2-bromopropane
Fluorobenzene

M-524-IS-2 1 x 1 mL
2.0 mg/mL in MeOH

Fluorobenzene

M-524-IS 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

1,2-Dichlorobenzene-d₄
Fluorobenzene

M-502-IS-2 1 x 1 mL
2.0 mg/mL each in MeOH 3 comps.

1-Chloro-2-bromopropane
Fluorobenzene
Methylene chloride-d₂

M-001R 1 x 1 mL
20 mg/mL each in MeOH 3 comps.

Bromochloromethane
1,4-Dichlorobutane
2-Bromo-1-chloropropane

M-8020-IS 1 x 1 mL
0.2 mg/mL each in MeOH 2 comps.

4-Bromofluorobenzene
α,α,α-Trifluorotoluene

M-8240/60-IS 1 x 1 mL
0.2 mg/mL each in MeOH 5 comps.

Bromochloromethane
Chlorobenzene-d₅
1,4-Dichlorobenzene-d₄
1,4-Difluorobenzene
Pentafluorobenzene

M-8260-IS-R 1 x 1 mL
0.2 mg/mL each in MeOH 4 comps.

2-Bromo-1-chloropropane
1,4-Difluorobenzene
1,4-Dichlorobenzene-d₄
Pentafluorobenzene

M-8260-IS 1 x 1 mL
0.2 mg/mL each in MeOH 4 comps.

Chlorobenzene-d₅
1,4-Difluorobenzene
1,4-Dichlorobenzene-d₄
Pentafluorobenzene

M-8260A/B-IS 1 x 1 mL
0.2 mg/mL each in MeOH 3 comps.

Chlorobenzene-d₅
1,4-Dichlorobenzene-d₄
Fluorobenzene

ISTD/SS Evaluation Mixtures

Conventional ISTD/SS Evaluation Mixture

M-CONV-IS/SS

200 µg/mL each in MeOH

2-Bromochlorobenzene
4-Bromochlorobenzene
Bromochloromethane
p-Bromofluorobenzene
2-Bromo-1-chloropropane
1-Chloro-2-fluorobenzene
1-Chloro-3-fluorobenzene
1-Chloro-4-fluorobenzene

1 x 1 mL
15 comps.

2-Chloropropane
Dibromofluoromethane
1,4-Dichlorobutane
1,4-Difluorobenzene
Fluorobenzene
Pentafluorobenzene
α,α,α-Trifluorotoluene

Deuterated ISTD/SS Evaluation Mixture

M-DEUT-IS/SS

200 µg/mL each in MeOH

Benzene-d₆
Chlorobenzene-d₅
1,2-Dichlorobenzene-d₄
1,4-Dichlorobenzene-d₄
1,2-Dichloroethane-d₄
Ethylbenzene-d₁₀
Methylene chloride-d₂
Toluene-d₈

1 x 1 mL
8 comps.

Popular Surrogate Standards

M-502-IS-ASL

2.0 mg/mL each in MeOH

2-Bromo-1-chloropropane
1-Chloro-2-fluorobenzene

1 x 1 mL
2 comps.

Alternate Source

M-524-SS

2.0 mg/mL each in MeOH

4-Bromofluorobenzene
1,2-Dichlorobenzene-d₄

1 x 1 mL
2 comps.

M-624-SS-M

20 mg/mL each in MeOH

4-Bromofluorobenzene
Fluorobenzene
Pentafluorobenzene

1 x 1 mL
3 comps.

M-8020-SS

2.0 mg/mL each in MeOH

4-Bromochlorobenzene
1,4-Difluorobenzene
Fluorobenzene

1 x 1 mL
3 comps.

M-8021-SS

2.0 mg/mL each in MeOH

4-Bromochlorobenzene
1,4-Dichlorobutane

1 x 1 mL
2 comps.

M-8021-SS-M

2.0 mg/mL each in MeOH

Bromochloromethane
1,4-Dichlorobutane

1 x 1 mL
2 comps.

M-8021A-SS

20 mg/mL each in MeOH

4-Bromochlorobenzene
Bromochloromethane
1,4-Dichlorobutane
2-Bromo-1-chloropropane

1 x 1 mL
4 comps.

M-8240/60-SS

0.2 mg/mL each in MeOH

p-Bromofluorobenzene
Dibromofluoromethane
1,2-Dichloroethane-d₄
Toluene-d₈

1 x 1 mL
4 comps.

Popular ISTD/SS Standards

M-502-IS/SS

2.0 mg/mL each in MeOH

1-Chloro-3-fluorobenzene
2-Chloropropane
Fluorobenzene
α,α,α-Trifluorotoluene

1 x 1 mL
4 comps.

M-502-IS-QC

1.0 mg/mL each in MeOH

1-Chloro-2-bromopropane
1-Chloro-2-fluorobenzene
Fluorobenzene

1 x 1 mL
3 comps.

M-524-FS

2.0 mg/mL each in MeOH

4-Bromofluorobenzene
1,2-Dichlorobenzene-d₄
Fluorobenzene

1 x 1 mL
3 comps.

M-8010-IS/SS

150 µg/mL each in MeOH

4-Bromochlorobenzene
Bromochloromethane
4-Bromofluorobenzene

1 x 1 mL
3 comps.

M-8020-IS/SS-ASL

1.5 mg/mL each in MeOH

4-Bromochlorobenzene
p-Bromofluorobenzene
1,4-Difluorobenzene
Fluorobenzene
α,α,α-Trifluorotoluene

1 x 1 mL
5 comps.

M-8240/60-IS/SS

0.2 mg/mL each in MeOH

Bromochloromethane
p-Bromofluorobenzene
Chlorobenzene-d₅
Dibromofluoromethane
1,4-Dichlorobenzene-d₄
1,2-Dichloroethane-d₄
1,4-Difluorobenzene
Pentafluorobenzene
Toluene-d₈

1 x 1 mL
9 comps.

M-8260A/B-IS/SS

200 µg/mL each in MeOH

p-Bromofluorobenzene
Chlorobenzene-d₅
Dibromofluoromethane
1,4-Dichlorobenzene-d₄
1,2-Dichloroethane-d₄
Fluorobenzene
Toluene-d₈

1 x 1 mL
7 comps.



EPA Method 500 Series

Method 503.1 Purgeable Aromatics & Alkenes

Purgeable Aromatics & Alkenes

M-503 1 x 1 mL
M-503-PAK 5 x 1 mL
 0.2 mg/mL each in MeOH 28 comps.

SAVE

Benzene	4-Isopropyltoluene
Bromobenzene	Naphthalene
<i>n</i> -Butylbenzene	<i>n</i> -Propylbenzene
<i>sec</i> -Butylbenzene	Styrene
<i>tert</i> -Butylbenzene	Tetrachloroethene
Chlorobenzene	Toluene
2-Chlorotoluene	1,2,3-Trichlorobenzene
4-Chlorotoluene	1,2,4-Trichlorobenzene
1,2-Dichlorobenzene	Trichloroethene
1,3-Dichlorobenzene	1,2,4-Trimethylbenzene
1,4-Dichlorobenzene	1,3,5-Trimethylbenzene
Ethylbenzene	<i>o</i> -Xylene
Hexachlorobutadiene	<i>m</i> -Xylene
Isopropylbenzene	<i>p</i> -Xylene

Internal Standard

M-602-SS 1 x 1 mL
M-602-SS-PAK 5 x 1 mL
 0.2 mg/mL in MeOH

SAVE

α,α,α -Trifluorotoluene

Method 504 EDB & DBCP by ECD

EDB & DBCP

M-504 1 x 1 mL
M-504-PAK 5 x 1 mL
 0.2 mg/mL each in MeOH

SAVE

M-504-10X 1 x 1 mL
M-504-10X-PAK 5 x 1 mL
 2.0 mg/mL each in MeOH 2 comps.

SAVE

1,2-Dibromoethane (EDB) 1,2-Dibromo-3-chloropropane (DBCP)

Method 504.1 EDB, DBCP & TCP by ECD

Calibration Stock Solution

M-504.1-CSS 1 x 1 mL
M-504.1-CSS-PAK 5 x 1 mL
 0.2 mg/mL each in MeOH 3 comps.

SAVE

1,2-Dibromoethane (EDB) 1,2,3-Trichloropropane
 1,2-Dibromo-3-chloropropane (DBCP)

Laboratory Fortified Blank Sample Concentrate

M-504.1-LFB 1 x 1 mL
M-504.1-LFB-PAK 5 x 1 mL
 0.25 μ g/mL each in MeOH 3 comps.

SAVE

1,2-Dibromoethane (EDB) 1,2,3-Trichloropropane
 1,2-Dibromo-3-chloropropane (DBCP)

MDL Check Sample Concentrate

M-504.1-MDL 1 x 1 mL
M-504.1-MDL-PAK 5 x 1 mL
 0.02 μ g/mL each in MeOH 3 comps.

SAVE

1,2-Dibromoethane (EDB) 1,2,3-Trichloropropane
 1,2-Dibromo-3-chloropropane (DBCP)

Method 504 Set

M-504.1-SET 3 x 1 mL
 (M-504.1-CSS, M-504.1-LFB, M-504.1-MDL)

Method 505 Organohalide Pesticides by Microextraction & GC/ECD

M-505R-2 1 x 1 mL
M-505R-2-PAK 5 x 1 mL
 At stated conc. in MeOH 16 comps.

SAVE

Alachlor (10 μ g/mL)	Heptachlor epoxide (1 μ g/mL)
Aldrin (1 μ g/mL)	Hexachlorobenzene (1 μ g/mL)
Atrazine (250 μ g/mL)	Hexachlorocyclopentadiene (1 μ g/mL)
α -Chlordane (1 μ g/mL)	Lindane (1 μ g/mL)
γ -Chlordane (1 μ g/mL)	Methoxychlor (5 μ g/mL)
Dieldrin (1 μ g/mL)	<i>cis</i> -Nonachlor (1 μ g/mL)
Endrin (1 μ g/mL)	<i>trans</i> -Nonachlor (1 μ g/mL)
Heptachlor (1 μ g/mL)	Simazine (250 μ g/mL)

M-505-ASL 1 x 1 mL
M-505-ASL-PAK 5 x 1 mL
 At stated conc. in Acetone 12 comps.

Alternate Source

SAVE

Alachlor (50 μ g/mL)	Heptachlor (20 μ g/mL)
Aldrin (20 μ g/mL)	Heptachlor epoxide (Isomer B) (20 μ g/mL)
Atrazine (500 μ g/mL)	Hexachlorobenzene (10 μ g/mL)
γ -BHC (20 μ g/mL)	Hexachlorocyclopentadiene (20 μ g/mL)
Dieldrin (20 μ g/mL)	Methoxychlor (200 μ g/mL)
Endrin (20 μ g/mL)	Simazine (100 μ g/mL)

Multi-Component Analytes

(Polychlorinated Biphenyls, Chlordane & Toxaphene)

Each at 1,000 μ g/mL in Hexane

AccuPAK™ (5 x 1 mL)

SAVE

Aroclors #	Cat. No.	1 mL	Cat. No.	PAK
Aroclor 1016	C-216S-H-10X		C-216S-H-10X-PAK	
Aroclor 1221	C-221S-H-10X		C-221S-H-10X-PAK	
Aroclor 1232	C-232S-H-10X		C-232S-H-10X-PAK	
Aroclor 1242	C-242S-H-10X		C-242S-H-10X-PAK	
Aroclor 1248	C-248S-H-10X		C-248S-H-10X-PAK	
Aroclor 1254	C-254S-H-10X		C-254S-H-10X-PAK	
Aroclor 1260	C-260S-H-10X		C-260S-H-10X-PAK	
Aroclor 1262	C-262S-H-10X		C-262S-H-10X-PAK	
Aroclor 1268	C-268S-H-10X		C-268S-H-10X-PAK	
Pesticides				
Chlordane	P-017S-H-10X		P-017S-H-10X-PAK	
Toxaphene	P-093S-H-10X		P-093S-H-10X-PAK	

Degradation Standard

P-045S 1 x 1 mL
 100 μ g/mL in MeOH
 Endrin

Method 506 Phthalate Esters by PID

Phthalate Esters

M-506 1 x 1 mL
M-506-PAK 5 x 1 mL
 1.0 mg/mL each in Isooctane 7 comps.

SAVE

Benzyl butyl phthalate	bis(2-Ethylhexyl)adipate
Dimethyl phthalate	bis(2-Ethylhexyl)phthalate
Diethyl phthalate	Di- <i>n</i> -octyl phthalate
Di- <i>n</i> -butyl phthalate	

M-506-QC 1 x 1 mL
M-506-QC-PAK 5 x 1 mL
 At stated conc. in MeOH 7 comps.

SAVE

Benzyl butyl phthalate (0.25 mg/mL)	bis(2-Ethylhexyl)adipate (1.2 mg/mL)
Dimethyl phthalate (0.1 mg/mL)	bis(2-Ethylhexyl)phthalate (0.25 mg/mL)
Diethyl phthalate (0.1 mg/mL)	Di- <i>n</i> -octyl phthalate (0.65 mg/mL)
Di- <i>n</i> -butyl phthalate (0.1 mg/mL)	



Method 507 Nitrogen & Phosphorus Containing Pesticides by GC/NPD

Method 507 Set M-507-R-SET

8 x 1 mL (M-507A, M-507B, M-507C, M-507D, M-507E, M-507F-R2, M-507G, M-507H)

Mix A

M-507A

M-507A-PAK

1.0 mg/mL each in MtBE

SAVE

1 x 1 mL

5 x 1 mL

6 comps.

Ametryn
Cycloate
Disulfoton

Fenamiphos
Merphos
Prometon

Mix E

M-507E

M-507E-PAK

1.0 mg/mL each in MtBE

SAVE

1 x 1 mL

5 x 1 mL

8 comps.

Dichlorvos
Fenarimol
Fluridone
Napropamide

Pebulate (*Tillam*)
Simetryn
Tebuthiuron
Terbacil

Mix B

M-507B

M-507B-PAK

1.0 mg/mL each in MtBE

SAVE

1 x 1 mL

5 x 1 mL

9 comps.

Atrazine
Diphenamid
EPTC
Ethoprop
Mevinphos

Prometryne
Propazine
Terbutryn
Triadimefon

Mix F

M-507F-R2

M-507F-R2-PAK

1.0 mg/mL each in Acetone

SAVE

1 x 1 mL

5 x 1 mL

2 comps.

Methyl paraoxon

Simazine

Mix G

M-507G

M-507G-PAK

1.0 mg/mL each in MtBE

SAVE

1 x 1 mL

5 x 1 mL

8 comps.

Benefin
Isopropalin
Pendimethalin
Oxadiazon

Oxyfluorfen
Propachlor
Profluralin
Trifluralin

Mix C

M-507C

M-507C-PAK

1.0 mg/mL each in MtBE

SAVE

1 x 1 mL

5 x 1 mL

9 comps.

Butachlor
Carboxin
Diazinon
Metolachlor
Metribuzin

MGK-264
Norflurazon
Terbufos
Vernolate

Mix H

M-507H

M-507H-PAK

1.0 mg/mL each in MtBE

SAVE

1 x 1 mL

5 x 1 mL

DEF (for Merphos quantitation)

Mix D

M-507D

M-507D-PAK

1.0 mg/mL each in MtBE

SAVE

1 x 1 mL

5 x 1 mL

10 comps.

Alachlor
Atraton
Bromacil
Butylate
Chlorpropham

Hexazinone
Molinate
Pronamide
Stirofos
Tricyclazole

Performance Check Solution

M-507-QC

M-507-QC-PAK

At stated conc. in MtBE

SAVE

1 x 1 mL

5 x 1 mL

6 comps.

Atrazine (150 ng/mL)
DNB (2500 ng/mL)
Bromacil (5000 ng/mL)

Prometon (300 ng/mL)
TPP (2500 ng/mL)
Vernolate (50 ng/mL)

Surrogate Standard

M-507-SS

M-507-SS-PAK

0.25 mg/mL in MtBE

M-507-SS-4X

1.0 mg/mL in MtBE

SAVE

1 x 1 mL

5 x 1 mL

1 x 1 mL

1,3-Dimethyl-2-nitrobenzene

Internal Standard

M-507-IS

M-507-IS-PAK

0.5 mg/mL in MtBE

M-507-IS-10X

5.0 mg/mL in MtBE

SAVE

1 x 1 mL

5 x 1 mL

1 x 1 mL

Triphenyl phosphate



EPA Method 500 Series

Method 508 Chlorinated Pesticides by GC/ECD

Chlorinated Pesticides Mix A

M-508P-A 1 x 1 mL
M-508P-A-PAK 5 x 1 mL
1.0 mg/mL each in MtBE

SAVE

17 comps.

Aldrin	4,4'-DDE	Endrin
α -BHC	4,4'-DDT	Endrin aldehyde
β -BHC	Dieldrin	Heptachlor
δ -BHC	Endosulfan I	Heptachlor epoxide
γ -BHC	Endosulfan II	Methoxychlor
4,4'-DDD	Endosulfan sulfate	

Technical Note

Endrin & DDT can break down in the injection port at elevated temperatures. Breakdown can be monitored by running the Pesticide Degradation Standard (M-8081-DS). The problem can be alleviated by replacing the dirty injection port liner, or by using a lower injection port temperature.

Internal Standard

M-508-IS 1 x 1 mL
M-508-IS-PAK 5 x 1 mL
0.1 mg/mL in MtBE
M-508-IS-10X 1 x 1 mL
1.0 mg/mL in MtBE

SAVE

Pentachloronitrobenzene

Surrogate Standards

M-508-SS 1 x 1 mL
M-508-SS-PAK 5 x 1 mL
0.5 mg/mL in MtBE

SAVE

4,4'-Dichlorobiphenyl

M-508-SS-2 1 x 1 mL
M-508-SS-2-PAK 5 x 1 mL
0.5 mg/mL in MtBE

SAVE

Decachlorobiphenyl

Decomposition Solution

M-508-DS-100X 1 x 1 mL
M-508-DS-100X-PAK 5 x 1 mL
At stated conc. in MtBE

SAVE

2 comps.

p,p'-DDT (200 μ g/mL) Endrin (100 μ g/mL)

Performance Check Solution

M-508-QC 1 x 1 mL
M-508-QC-PAK 5 x 1 mL
At stated conc. in MtBE

SAVE

4 comps.

δ -BHC (40 ng/mL) Chlorpyrifos (2 ng/mL)
Chlorothalonil (50 ng/mL) Dacthal (50 ng/mL)

Chlorinated Pesticides Mix B

M-508P-B-R 1 x 1 mL
M-508P-B-R-PAK 5 x 1 mL
1.0 mg/mL each in MtBE

SAVE

13 comps.

α -Chlordane	Chlorpyrifos	<i>cis</i> -Permethrin (0.5 mg/mL)
γ -Chlordane	DCPA	<i>trans</i> -Permethrin (1.5 mg/mL)
Chlorobenzilate	Etridiazole	Propachlor
Chloroneb	Hexachlorobenzene	Trifluralin
Chlorothalonil		

Certificate will reflect actual *cis/trans* permethrin ratio

M-508P-B-R2 1 x 1 mL
M-508P-B-R2-PAK 5 x 1 mL
1.0 mg/mL each in MtBE

SAVE

15 comps.

α -Chlordane	Chlorpyrifos	<i>cis</i> -Permethrin (0.5 mg/mL)
γ -Chlordane	DCPA	<i>trans</i> -Permethrin (1.5 mg/mL)
Chlorobenzilate	Etridiazole	Propachlor
Chloroneb	Hexachlorobenzene	Trifluralin
Chlorothalonil	Cyanazine	<i>trans</i> -Nonachlor

Certificate will reflect actual *cis/trans* permethrin ratio

Method 508A PCBs by Perchlorination / GC

Aroclor® Stock Solution

M-508A-1 1 x 1 mL
M-508A-1-PAK 5 x 1 mL
5.0 mg/mL in MeOH

SAVE

Aroclor 1260

DCB Stock Solution

M-508A-2 1 x 1 mL
M-508A-2-PAK 5 x 1 mL
1.0 mg/mL in Toluene

SAVE

Decachlorobiphenyl

Perchlorinated Aromatics

Neats	Cat. No.	Unit
Decachlorobiphenyl	C-209N	10 mg
Hexachlorobenzene	A-012	100 mg
Octachlorodibenzofuran	F-801N	50 mg
Octachlorodibenzo- <i>p</i> -dioxin	D-801N	50 mg

Solutions	35 μ g/mL in Toluene	1 mL
Octachlorostyrene	PC-001S	
Perchlorinated p,p'-DDE	PC-002S	
Tetradecachloro- <i>o</i> -terphenyl	T-004S	
Tetradecachloro- <i>m</i> -terphenyl	T-005S	
Tetradecachloro- <i>p</i> -terphenyl	T-006S	
Aroclor 5442	T-442S	



Method 508.1 Chlorinated Pesticides, Herbicides & Organo-Halides by Liquid - Solid Extraction & ECD

Chlorinated Pesticide Mix #1

M-508.1-X1

M-508.1-X1-PAK

500 µg/mL each in Ethyl acetate

SAVE

1 x 1 mL

5 x 1 mL

19 comps.

Aldrin	Dieldrin
α-BHC	Endosulfan I
β-BHC	Endosulfan II
δ-BHC	Endosulfan sulfate
γ-BHC	Endrin
α-Chlordane	Endrin aldehyde
γ-Chlordane	Heptachlor
4,4'-DDD	Heptachlor epoxide (B)
4,4'-DDE	Methoxychlor
4,4'-DDT	

Chlorinated Pesticide Mix #2

M-508.1-X2

M-508.1-X2-PAK

500 µg/mL each in Ethyl acetate

SAVE

1 x 1 mL

5 x 1 mL

17 comps.

Alachlor	Hexachlorocyclopentadiene
Atrazine	Metolachlor
Chlorobenzilate	Metribuzin
Chloroneb	cis-Permethrin
Chlorothalonil	trans-Permethrin
Cyanazine	Propachlor
DCPA	Simazine
Etridiazole	Trifluralin
Hexachlorobenzene	

Certificate will reflect actual cis/trans permethrin ratio

Regulated Pesticide Mix (SDWA)

M-508.1-ASL

M-508.1-ASL-PAK

100 µg/mL each in MtBE

SAVE

1 x 1 mL

5 x 1 mL

17 comps.

Alachlor	Dieldrin	Methoxychlor
Aldrin	Endrin	Metolachlor
Atrazine	Heptachlor	Metribuzin
β-BHC	Heptachlor epoxide (Isomer B)	Propachlor
α-Chlordane	Hexachlorobenzene	Simazine
γ-Chlordane	Hexachlorocyclopentadiene	

Decomposition Solution

M-508.1-DS-100X

M-508.1-DS-100X-PAK

100 µg/mL each in Ethyl acetate

SAVE

1 x 1 mL

5 x 1 mL

2 comps.

4,4'-DDT	Endrin
----------	--------

Internal Standard Solution

M-508.1-IS

M-508.1-IS-PAK

100 µg/mL each in Ethyl acetate

SAVE

1 x 1 mL

5 x 1 mL

Pentachloronitrobenzene

Surrogate Standard Solution

M-508.1-SS

M-508.1-SS-PAK

100 µg/mL each in Ethyl acetate

SAVE

1 x 1 mL

5 x 1 mL

4,4'-Dibromobiphenyl

Performance Check Solution

M-508.1-QC

M-508.1-QC-PAK

At stated conc. in MtBE

SAVE

1 x 1 mL

5 x 1 mL

4 comps.

δ-BHC	(400 ng/mL)	Chlorpyrifos	(20 ng/mL)
Chlorothalonil	(500 ng/mL)	DCPA	(500 ng/mL)

Method 509 Ethylene Thiourea by GC/NPD

Performance Check Solution

M-509-PC

At stated conc. in Ethyl acetate containing 0.1% w/v DTT (scavenger)

1 x 1 mL

3 comps.

Ethylene thiourea	(10 ng/mL)
4-Methylimidazolidine-2-thione	(100 ng/mL)
3,4,5,6-Tetrahydro-2-pyrimidinethiol	(1000 ng/mL)

Ethylene Thiourea Standard

M-509

0.1 mg/mL in Ethyl acetate containing 0.1% w/v DTT (scavenger)

1 x 1 mL

Ethylene thiourea

Internal Standard

M-509-IS

0.1 mg/mL in Ethyl acetate containing 0.1% w/v DTT (scavenger)

1 x 1 mL

3,4,5,6-Tetrahydro-2-pyrimidinethiol (THP)

Surrogate Standard

M-509-SS

0.1 mg/mL in Ethyl acetate containing 0.1% w/v DTT (scavenger)

1 x 1 mL

4-Methylimidazolidine-2-thione

Radical Scavenger Solution

M-509-RS-10ML

1.0 mg/mL in Ethyl acetate

1 x 10 mL

Dithiothreitol (DTT)

Thousands of Standards,
just a click away



AccuStandard.com



EPA Method 500 Series

Method 515.1 Chlorinated Acids in Water by GC/ECD

Methyl Derivatives

M-515-R 1 x 1 mL
M-515-R-PAK 5 x 1 mL
1.0 mg/mL each in MtBE as methyl derivatives 16 comps.

Acifluorfen, ME	3,5-Dichlorobenzoic acid, ME
Bentazon, ME	Dichlorprop, ME
Chloramben, ME	Dinoseb, ME
2,4-D, ME	4-Nitrophenol, ME
Dalapon, ME	Pentachlorophenol, ME
2,4-DB, ME	Picloram, ME
DCPA, Di ME	2,4,5-T, ME
Dicamba, ME	2,4,5-TP, ME

Underivatized Analytes

M-515A-R2 1 x 1 mL
M-515A-R2-PAK 5 x 1 mL
At stated conc. in MeOH 16 comps.

Acifluorfen (100 µg/mL)	3,5-Dichlorobenzoic acid (100 µg/mL)
Bentazon (200 µg/mL)	Dichlorprop (300 µg/mL)
Chloramben (100 µg/mL)	Dinoseb (200 µg/mL)
2,4-D (200 µg/mL)	4-Nitrophenol (100 µg/mL)
Dalapon (1300 µg/mL)	Pentachlorophenol (100 µg/mL)
2,4-DB (800 µg/mL)	Picloram (100 µg/mL)
DCPA acid (100 µg/mL)	2,4,5-T (100 µg/mL)
Dicamba (100 µg/mL)	2,4,5-TP (100 µg/mL)

Technical Note

If you require the complete absence of partial esterification, we recommend M-515.4A and M-515.3A products.

Performance Check Solution

M-515-QC 1 x 1 mL
M-515-QC-PAK 5 x 1 mL
At stated conc. in MtBE 3 comps.

3,5-Dichlorobenzoic acid methyl ester	(600 ng/mL)
Dinoseb methyl ether	(4 ng/mL)
4-Nitroanisole	(1600 ng/mL)

Performance Check Solution with ISTD & SS

M-515-QC-R 1 x 1 mL
M-515-QC-R-PAK 5 x 1 mL
At stated conc. in MtBE 5 comps.

4,4'-Dibromooctafluorobiphenyl (ISTD)	(250 ng/mL)
3,5-Dichlorobenzoic acid methyl ester	(600 ng/mL)
2,4-Dichlorophenyl acetic acid methyl ester (SS)	(500 ng/mL)
Dinoseb methyl ether	(4 ng/mL)
4-Nitroanisole	(1600 ng/mL)

Internal Standard

M-515-IS 1 x 1 mL
M-515-IS-PAK 1 x 1 mL
0.1 mg/mL in MtBE

4,4'-Dibromooctafluorobiphenyl

Surrogate Standards

M-515-SS 1 x 1 mL
M-515-SS-PAK 5 x 1 mL
0.1 mg/mL in MtBE
M-515-SS-50X 5 x 1 mL
5.0 mg/mL in MtBE

2,4-Dichlorophenylacetic acid methyl ester

P-244S 1 x 1 mL
0.1 mg/mL in MeOH

2,4-Dichlorophenylacetic acid

Method 515.2 Chlorinated Acids in Water by GC/ECD

Methyl Derivatives

M-515.2-1 1 x 1 mL
M-515.2-1-PAK 5 x 1 mL
At stated conc. in MeOH 6 comps.

DCPA, ME (100 µg/mL)	Dinoseb, ME (200 µg/mL)
3,5-Dichlorobenzoic acid, ME (500 µg/mL)	Pentachlorophenol, ME (100 µg/mL)
Dichlorprop, ME (100 µg/mL)	2,4,5-T, ME (100 µg/mL)

M-515.2-2 1 x 1 mL
M-515.2-2-PAK 5 x 1 mL
At stated conc. in MeOH 7 comps.

Acifluorfen, ME (200 µg/mL)	Dicamba, ME (300 µg/mL)
Bentazon, ME (1000 µg/mL)	Picloram, ME (300 µg/mL)
2,4-D, ME (100 µg/mL)	2,4,5-TP, ME (100 µg/mL)
2,4-DB, ME (1000 µg/mL)	

Underivatized Analytes

M-515.2A-1 1 x 1 mL
M-515.2A-1-PAK 5 x 1 mL
At stated conc. in MeOH 6 comps.

DCPA acid (100 µg/mL)	Dinoseb (200 µg/mL)
3,5-Dichlorobenzoic acid (500 µg/mL)	Pentachlorophenol (100 µg/mL)
Dichlorprop (100 µg/mL)	2,4,5-T (100 µg/mL)

M-515.2A-2 1 x 1 mL
M-515.2A-2-PAK 5 x 1 mL
At stated conc. in MeOH 7 comps.

Acifluorfen (200 µg/mL)	Dicamba (300 µg/mL)
Bentazon (1000 µg/mL)	Picloram (300 µg/mL)
2,4-D (100 µg/mL)	2,4,5-TP (100 µg/mL)
2,4-DB (1000 µg/mL)	

Method 515.1 & 515.2 Chlorinated Acids in Water by GC/ECD

Laboratory Performance Check Solution

M-8150/51-LPC-5ML 1 x 5 mL
At stated conc. in Isooctane 5 comps.

3,5-Dichlorobenzoic acid (600 ng/mL)	DCAA (500 ng/mL)
Dinoseb (4 ng/mL)	DBOB (250 ng/mL)
4-Nitrophenol (1600 ng/mL)	



Method 515.3 Chlorinated Acids in Drinking Water by ECD

Underivatized Acids

M-515.3A 1 x 1 mL
M-515.3A-PAK 5 x 1 mL
At stated conc. in Acetone 17 comps.

SAVE

Acifluorfen (50 µg/mL)	3,5-Dichlorobenzoic acid (50 µg/mL)
Bentazon (100 µg/mL)	Dichlorprop (100 µg/mL)
Chloramben (50 µg/mL)	Dinoseb (100 µg/mL)
2,4-D (100 µg/mL)	4-Nitrophenol (100 µg/mL)
Dalapon (100 µg/mL)	Pentachlorophenol (10 µg/mL)
2,4-DB (100 µg/mL)	Picloram (100 µg/mL)
DCPA Diacid (50 µg/mL)	2,4,5-T (25 µg/mL)
DCPA monoacid (50 µg/mL)	Silvex (25 µg/mL)
Dicamba (50 µg/mL)	

Laboratory Performance Check

Methyl Derivatives

M-515.3-LPC 1 x 1 mL
M-515.3-LPC-PAK 5 x 1 mL
At stated conc. in MtBE 4 comps.

SAVE

2,4-DB methyl ester (25 µg/mL)	Chloramben methyl ester (12.5 µg/mL)
Dinoseb methyl ether (25 µg/mL)	4-Nitroanisole (25 µg/mL)

Independent Check Standard Methyl Derivatives

M-515.3-ICS 1 x 1 mL
M-515.3-ICS-PAK 5 x 1 mL
At stated conc. in MtBE 16 comps.

SAVE

Acifluorfen methyl ester (50 µg/mL)	Methyl-3,5-Dichlorobenzoate (50 µg/mL)
Bentazon methyl (100 µg/mL)	Dichlorprop methyl ester (100 µg/mL)
Chloramben methyl ester (50 µg/mL)	Dinoseb methyl ether (100 µg/mL)
2,4-D methyl ester (100 µg/mL)	4-Nitroanisole (100 µg/mL)
Dalapon methyl ester (100 µg/mL)	Pentachloroanisole (10 µg/mL)
2,4-DB methyl ester (100 µg/mL)	Picloram methyl ester (100 µg/mL)
Dacthal (100 µg/mL)	2,4,5-T methyl ester (25 µg/mL)
Dicamba methyl ester (50 µg/mL)	Silvex methyl ester (25 µg/mL)

Internal Standard

M-515-IS 1 x 1 mL
M-515-IS-PAK 5 x 1 mL
0.1 mg/mL in MtBE

SAVE

4,4'-Dibromooctafluorobiphenyl

Method 515.4 Chlorinated Acids in Drinking Water by ECD

Underivatized Acids

M-515.4A 1 x 1 mL
M-515.4A-PAK 5 x 1 mL
At stated conc. in Acetone 17 comps.

SAVE

Acifluorfen (50 µg/mL)	3,5-Dichlorobenzoic acid (50 µg/mL)
Bentazon (100 µg/mL)	Dichlorprop (100 µg/mL)
Chloramben (50 µg/mL)	Dinoseb (100 µg/mL)
2,4-D (100 µg/mL)	Pentachlorophenol (10 µg/mL)
Dalapon (100 µg/mL)	Picloram (50 µg/mL)
2,4-DB (100 µg/mL)	2,4,5-T (25 µg/mL)
DCPA Diacid (50 µg/mL)	Silvex (25 µg/mL)
DCPA monoacid (50 µg/mL)	Quinclorac (50 µg/mL)
Dicamba (50 µg/mL)	

Underivatized Surrogate

M-8150B-SS 1 x 1 mL
M-8150B-SS-PAK 5 x 1 mL
0.1 mg/mL in Acetone
 2,4-Dichlorophenylacetic acid

SAVE

Quality Control Sample Methyl Derivatives

M-515.4-QCS 1 x 1 mL
M-515.4-QCS-PAK 5 x 1 mL
At stated conc. in MtBE 16 comps.

SAVE

Acifluorfen methyl ester (50 µg/mL)	Methyl-3,5-Dichlorobenzoate (50 µg/mL)
Bentazon methyl (100 µg/mL)	Dichlorprop methyl ester (100 µg/mL)
Chloramben methyl ester (50 µg/mL)	Dinoseb methyl ether (100 µg/mL)
2,4-D methyl ester (100 µg/mL)	Pentachloroanisole (10 µg/mL)
Dalapon methyl ester (100 µg/mL)	Picloram methyl ester (50 µg/mL)
2,4-DB methyl ester (100 µg/mL)	2,4,5-T methyl ester (25 µg/mL)
Dacthal (100 µg/mL)	Silvex methyl ester (25 µg/mL)
Dicamba methyl ester (50 µg/mL)	Quinclorac methyl ester (50 µg/mL)

Technical Note

M-515.3A and M-515.4A are to be used as procedural standards for the calibration of the method. These standards should be carried through the entire extraction and derivatization procedure associated with the samples.

Buy AccuPAKs™
Save 20-40% 5 x 1 mL





EPA Method 500 Series

Method 521 Nitrosamines by SPE & Capillary Column GC

Analyte Stock Solution

M-521 1 x 1 mL
200 µg/mL each in CH₂Cl₂ 7 comps.

N-Nitrosodimethylamine	N-Nitrosodi-n-butylamine
N-Nitrosomethylethylamine	N-Nitrosopyrrolidine
N-Nitrosodiethylamine	N-Nitrosopiperidine
N-Nitrosodi-n-propylamine	

Internal Standard Stock Solution

M-521-IS 1 x 1 mL
M-521-IS-PAK 5 x 1 mL
1.0 mg/mL in CH₂Cl₂ **SAVE**

N-Nitrosodi-n-propylamine-d₄

Surrogate Standard Stock Solution

M-521-SS 1 x 1 mL
M-521-SS-PAK 5 x 1 mL
1.0 mg/mL in CH₂Cl₂ **SAVE**

N-Nitrosodimethylamine-d₆

Method 524.2 Volatile Organic Compounds by GC/MS

See M-502.2 VOCs by PID/ELCD
54 Liquid & 6 Gaseous Compounds

Addition to Method 524.2 (Revision 4.0 August 1992)

M-524R-B * 1 x 1 mL
M-524R-B-PAK * 5 x 1 mL
2.0 mg/mL each in MeOH **SAVE** 24 comps.

Acetone	2-Hexanone
Acrylonitrile	Methacrylonitrile
Allyl chloride	Methylacrylate
2-Butanone	Methyl iodide
Carbon disulfide	Methylmethacrylate
Chloroacetonitrile	4-Methyl-2-pentanone
1-Chlorobutane	Methyl- <i>t</i> -butyl ether
<i>trans</i> -1,4-Dichloro-2-butene	Nitrobenzene
1,1-Dichloropropanone	2-Nitropropane
Diethyl ether	Pentachloroethane
Ethyl methacrylate	Propionitrile
Hexachloroethane	Tetrahydrofuran

Technical Note

Standards containing aldehydes and ketones in methanol are given short expiration periods because of their tendency to form acetals and ketals. Stabilizers are added to inhibit this reaction.

Mixtures of Internal, Surrogate Standards & Fortification Solutions

Internal Standards

M-502-IS 1 x 1 mL
M-502-IS-PAK 5 x 1 mL
2.0 mg/mL each in MeOH **SAVE** 2 comps.

1-Chloro-2-bromopropane Fluorobenzene

M-502-IS-2 1 x 1 mL
M-502-IS-2-PAK 5 x 1 mL
2.0 mg/mL each in MeOH **SAVE** 3 comps.

1-Chloro-2-bromopropane Methylene chloride-d₂
Fluorobenzene

M-524-IS 1 x 1 mL
M-524-IS-PAK 5 x 1 mL
2.0 mg/mL each in MeOH **SAVE** 2 comps.

1,2-Dichlorobenzene-d₄ Fluorobenzene

Method 524.2 VOCs by GC/MS (Continued)

M-524-IS-2 1 x 1 mL
M-524-IS-2-PAK 5 x 1 mL
2.0 mg/mL in MeOH **SAVE**
M-524-IS-2-10X 5 x 1 mL
20 mg/mL in MeOH

Fluorobenzene

Fortification Standard

M-524-FS 1 x 1 mL
M-524-FS-PAK 5 x 1 mL
2.0 mg/mL each in MeOH **SAVE** 3 comps.

4-Bromofluorobenzene Fluorobenzene
1,2-Dichlorobenzene-d₄

Surrogate Standard

M-524-SS 1 x 1 mL
M-524-SS-PAK 5 x 1 mL
2.0 mg/mL each in MeOH **SAVE** 2 comps.

4-Bromofluorobenzene 1,2-Dichlorobenzene-d₄

GC/MS Tuning Solution

M-624-SS-03-10X 1 x 1 mL
2.0 mg/mL each in MeOH

p-Bromofluorobenzene

Method 524.3 Purgeable Organic Compounds by GC/MS

See M-502.2 VOCs by PID/ELCD
54 Liquid & 6 Gaseous Compounds

M-524R-C 1 x 1 mL
M-524R-C-PAK 5 x 1 mL
2.0 mg/mL each in MeOH **SAVE** 18 comps.

1,3-Butadiene	Methyl acetate
1-Chlorobutane	Methyl iodide
Allyl chloride	Methyl- <i>t</i> -butyl ether
Carbon disulfide	Pentachloroethane
Chlorodifluoromethane	<i>t</i> -Amyl ethyl ether
Diethyl ether	<i>t</i> -Amyl methyl ether
Diisopropyl ether	<i>t</i> -Butyl alcohol
Ethyl methacrylate	<i>t</i> -Butyl ethyl ether
Hexachloroethane	Tetrahydrofuran

Internal Standard

M-524R-C-IS 1 x 1 mL
M-524R-C-IS-PAK 5 x 1 mL
2.0 mg/mL each in MeOH **SAVE** 3 comps.

1,4-Difluorobenzene 1,4-Dichlorobenzene-d₄
Chlorobenzene-d₅

Internal and Surrogate Standard

M-524R-C-IS/SS 1 x 1 mL
M-524R-C-IS/SS-PAK 5 x 1 mL
2.0 mg/mL each in MeOH **SAVE** 6 comps.

1,4-Difluorobenzene *tert*-Butyl methyl ether-d₃
Chlorobenzene-d₅ *p*-Bromofluorobenzene
1,4-Dichlorobenzene-d₄ 1,2-Dichlorobenzene-d₄

Surrogate Standard

M-524R-C-SS 1 x 1 mL
M-524R-C-SS-PAK 5 x 1 mL
2.0 mg/mL each in MeOH **SAVE** 3 comps.

tert-Butyl methyl ether-d₃ *p*-Bromofluorobenzene
1,2-Dichlorobenzene-d₄

* ColdPAK required to maintain integrity of product.



Method 525.1 Organic Compounds in Drinking Water by Liquid-Solid Extraction and Capillary GC/MS

PAH Mixtures

M-525-1		1 x 1 mL
M-525-1-PAK	SAVE	5 x 1 mL
0.1 mg/mL each in Acetone		13 comps.
M-525-1-5X		1 x 1 mL
M-525-1-5X-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in Acetone		13 comps.

Acenaphthylene	Chrysene
Anthracene	Dibenz[a,h]anthracene
Benz[a]anthracene	Fluorene
Benzo[b]fluoranthene	Indeno[1,2,3-cd]pyrene
Benzo[k]fluoranthene	Phenanthrene
Benzo[a]pyrene	Pyrene
Benzo[g,h,i]perylene	

Pesticide Mixtures

M-525-3		1 x 1 mL
M-525-3-PAK	SAVE	5 x 1 mL
0.1 mg/mL each in Acetone		
M-525-3-5X		1 x 1 mL
M-525-3-5X-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in Acetone		12 comps.

Alachlor	Heptachlor
Aldrin	Heptachlor epoxide
Atrazine	Lindane
α -Chlordane	Methoxychlor
γ -Chlordane	Simazine
Endrin	trans-Nonachlor

PCB Congener Mixtures

M-525-2		1 x 1 mL
M-525-2-PAK	SAVE	5 x 1 mL
0.1 mg/mL each in Acetone		8 comps.
M-525-2-5X		1 x 1 mL
M-525-2-5X-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in Acetone		8 comps.

2-Chlorobiphenyl (#1)
2,3-Dichlorobiphenyl (#5)
2,2',3,3',4,4',6-Heptachlorobiphenyl (#171)
2,2',4,4',5,6'-Hexachlorobiphenyl (#154)
2,2',3,3',4,5',6,6'-Octachlorobiphenyl (#200)
2,2',3',4,6-Pentachlorobiphenyl (#98)
2,2',4,4'-Tetrachlorobiphenyl (#47)
2,4,5-Trichlorobiphenyl (#29)

Semi-Volatile Mixtures

M-525-4		1 x 1 mL
M-525-4-PAK	SAVE	5 x 1 mL
0.1 mg/mL in Acetone (PCP 0.4 mg/mL)		
M-525-4-5X		1 x 1 mL
M-525-4-5X-PAK	SAVE	5 x 1 mL
0.5 mg/mL in Acetone (PCP 2.0 mg/mL)		9 comps.

Butylbenzylphthalate	Hexachlorobenzene
di-n-Butylphthalate	Hexachlorocyclopentadiene
Diethylphthalate	bis(2-Ethylhexyl)phthalate
bis(2-Ethylhexyl)adipate	Pentachlorophenol (PCP)
Dimethylphthalate	

Multi-Component / Analyte

M-525-5		1 x 1 mL
M-525-5-PAK	SAVE	5 x 1 mL
2.5 mg/mL in Acetone		
Toxaphene		

Internal Standard

M-525-IS		1 x 1 mL
M-525-IS-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂		4 comps.
Acenaphthene-d ₁₀	Perylene-d ₁₂	
Chrysene-d ₁₂	Phenanthrene-d ₁₀	

Tuning Standards

CLP-TS		1 x 1 mL
CLP-TS-PAK	SAVE	5 x 1 mL
50 μ g/mL in CH_2Cl_2		
Perfluorokerosene		

Fortification Standards

M-525-FS-1		1 x 1 mL
M-525-FS-1-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in Acetone		4 comps.
Acenaphthene-d ₁₀	Perylene-d ₁₂	
Chrysene-d ₁₂	Phenanthrene-d ₁₀	

M-525-TS		1 x 1 mL
M-525-TS-PAK	SAVE	5 x 1 mL
0.1 mg/mL in CH_2Cl_2		
DFTPP		

Surrogate Standard

M-525-SS		1 x 1 mL
M-525-SS-PAK	SAVE	5 x 1 mL
0.5 mg/mL in Acetone		
Pyrene-d ₁₀		

Buy the Complete Set and Save

Method 525 Organic Compounds in Drinking Water Sets

M-525-R-SET	5 x 1 mL (M-525-1, M-525-2, M-525-3, M-525-4, M-525-5)
M-525-R-5X-SET	5 x 1 mL (M-525-1-5X, M-525-2-5X, M-525-3-5X, M-525-4-5X, M-525-5)
M-525-SET	7 x 1 mL (M-525-1-5X, M-525-2-5X, M-525-3-5X, M-525-4-5X, M-525-5, M-525-IS, M-525-TS)



EPA Method 500 Series

Method 525.2 (Revision 1.0) Organic Compounds in Drinking Water by Liquid-Solid Extraction and Capillary GC/MS

All 112 analytes (excluding Disulfoton sulfoxide and Disulfoton sulfone which can be found in the Pesticide section) listed in this revision can be found in the mixes below. We realize that many labs will not be analyzing for all of these analytes at one time since it is not practical or necessary in many instances. If all the analytes must be determined, the following multiple calibration mixes are offered to accomplish this task. Several of these mixes are from our current product line and are grouped as nitrogen/phosphorus pesticides, organochlorine pesticides, semi-volatiles, polyaromatics, PCB congeners, and individual multi-component solutions for the Aroclors and Toxaphene. These solutions can be purchased individually or as a complete set for your laboratory's particular needs. Additionally, the required surrogate, internal, and tuning standards are offered below.

Nitrogen/Phosphorus Pesticides

M-507A 1.0 mg/mL each in MtBE 1 x 1 mL
6 comps.

Ametryn	Fenamiphos
Cycloate	Merphos
Disulfoton	Prometon

M-507B 1.0 mg/mL each in MtBE 1 x 1 mL
9 comps.

Atrazine	Prometryne
Diphenamid	Propazine
EPTC	Terbutryn
Ethoprop	Triadimefon
Mevinphos	

M-507C 1.0 mg/mL each in MtBE 1 x 1 mL
9 comps.

Butachlor	MGK-264
Carboxin	Norflurazon
Diazinon	Terbufos
Metolachlor	Vernolate
Metribuzin	

M-507D 1.0 mg/mL each in MtBE 1 x 1 mL
10 comps.

Alachlor	Hexazinone
Atraton	Molinate
Bromacil	Pronamide
Butylate	Stirofos
Chlorpropham	Tricyclazole

M-507E 1.0 mg/mL each in MtBE 1 x 1 mL
8 comps.

Dichlorvos	Pebulate (Tillam)
Fenarimol	Simetryn
Fluridone	Tebuthiuron
Napropamide	Terbacil

M-507F-R2 1.0 mg/mL each in Acetone 1 x 1 mL
2 comps.

Methyl paraoxon	Simazine
-----------------	----------

Auxiliary Standards

Internal Standard

M-525.2-IS		1 x 1 mL
M-525.2-IS-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in Acetone		3 comps.
Acenaphthene-d ₁₀	Phenanthrene-d ₁₀	
Chrysene-d ₁₂		

Surrogate Standard

M-525.2-SS		1 x 1 mL
M-525.2-SS-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in Acetone		3 comps.
1,3-Dimethyl-2-nitrobenzene	Triphenylphosphate	
Perylene-d ₁₂		

Internal/Surrogate Standard

M-525.2-IS/SS		1 x 1 mL
M-525.2-IS/SS-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in Acetone		6 comps.
Acenaphthene-d ₁₀	Perylene-d ₁₂	
Chrysene-d ₁₂	Phenanthrene-d ₁₀	
1,3-Dimethyl-2-nitrobenzene	Triphenylphosphate	

Tuning Standard

M-525.2-TS		1 x 1 mL
0.5 mg/mL each in CH ₂ Cl ₂		3 comps.
4,4'-DDT	Endrin	
DFTPP		

Technical Note

Endrin & DDT can break down in the injection port at elevated temperatures. Breakdown can be monitored by running the Pesticide Degradation Standard (M-8081-DS). The problem can be alleviated by replacing the dirty injection port liner, or by using a lower injection port temperature.

Multi-Component Technical Solutions

Toxaphene

M-525-5 1 x 1 mL
2.5 mg/mL in Acetone

Aroclor® 1016

C-216S-M-28.5X 1 x 1 mL
1.0 mg/mL in MeOH

Aroclor 1254

C-254S-M-28.5X 1 x 1 mL
1.0 mg/mL in MeOH

Aroclor 1260

C-260S-M-28.5X 1 x 1 mL
1.0 mg/mL in MeOH

Complete Method 525.2 Set

M-525.2-SET *					18 x 1 mL
M-507A	M-507D	M-508P-A	M-525-2-5X	M-525.2-IS	C-216S-M-28.5X
M-507B	M-507E	M-508P-B-R2	M-525-4R-5X	M-525.2-SS	C-254S-M-28.5X
M-507C	M-507F-R2	M-525-1-5X	M-525-5	M-525.2-TS	C-260S-M-28.5X

* ColdPAK required to maintain integrity of product.



Method 525.2 (Continued) Organic Compounds in Drinking Water by Liquid-Solid Extraction and Capillary GC/MS

Chlorinated Pesticides

Mix A

M-508P-A

M-508P-A-PAK

1.0 mg/mL each in MtBE

SAVE

1 x 1 mL

5 x 1 mL

17 comps.

Aldrin	Endosulfan I
α-BHC	Endosulfan II
β-BHC	Endosulfan sulfate
δ-BHC	Endrin
γ-BHC	Endrin aldehyde
4,4'-DDD	Heptachlor
4,4'-DDE	Heptachlor epoxide
4,4'-DDT	Methoxychlor
Dieldrin	

Mix B

M-508P-B-R2

M-508P-B-R2-PAK

1.0 mg/mL each in MtBE

SAVE

1 x 1 mL

5 x 1 mL

15 comps.

α-Chlordane	Etridiazole
γ-Chlordane	Hexachlorobenzene
Chlorobenzilate	trans-Nonachlor
Chloroneb	cis-Permethrin (0.5 mg/mL)
Chlorothalonil	trans-Permethrin (1.5 mg/mL)
Chlorpyrifos	Propachlor
Cyanazine	Trifluralin
DCPA	

Certificate will reflect actual cis/trans permethrin ratio

Semi-Volatile Analytes

PAH Mixtures

M-525-1-5X

0.5 mg/mL each in Acetone

1 x 1 mL

13 comps.

Acenaphthylene	Chrysene
Anthracene	Dibenz[a,h]anthracene
Benz[a]anthracene	Fluorene
Benzo[b]fluoranthene	Indeno[1,2,3-cd]pyrene
Benzo[k]fluoranthene	Phenanthrene
Benzo[a]pyrene	Pyrene
Benzo[g,h,i]perylene	

PCB Congener Mixtures

M-525-2-5X

0.5 mg/mL each in Acetone

1 x 1 mL

8 comps.

2-Chlorobiphenyl	2,2',3,3',4,5',6,6'-Octachlorobiphenyl
2,3-Dichlorobiphenyl	2,2',3',4,6-Pentachlorobiphenyl
2,2',3,3',4,4',6-Heptachlorobiphenyl	2,2',4,4'-Tetrachlorobiphenyl
2,2',4,4',5,6'-Hexachlorobiphenyl	2,4,5-Trichlorobiphenyl

Semi-Volatile Mixtures

M-525-4-R-5X

0.5 mg/mL each in Acetone

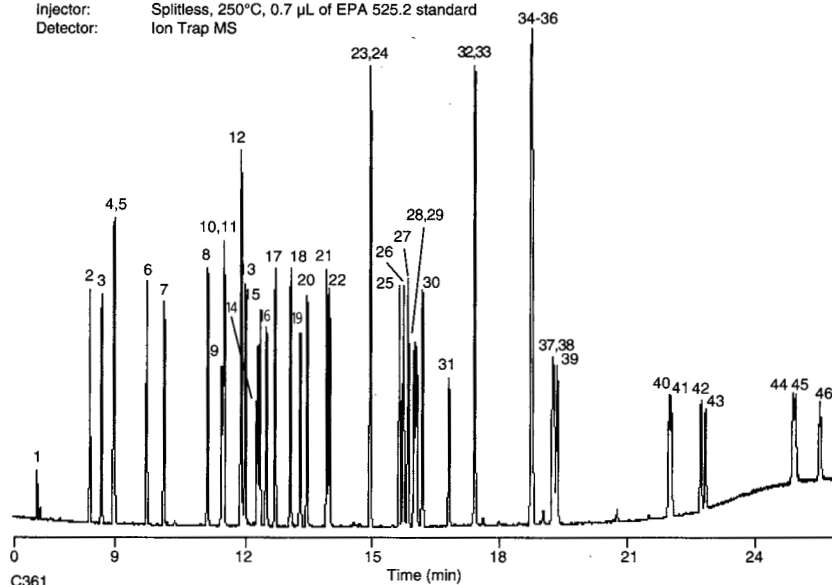
1 x 1 mL

11 comps.

Butylbenzylphthalate	2,6-Dinitrotoluene
di-n-Butylphthalate	Hexachlorocyclopentadiene
Diethylphthalate	bis(2-Ethylhexyl)phthalate
bis(2-Ethylhexyl)adipate	Isophorone
Dimethylphthalate	Pentachlorophenol (2.0 mg/mL)
2,4-Dinitrotoluene	

EPA Method 525.2

Column: DB-XLB
30 m x 0.25 mm I.D., 0.25 µm
122-1232
Agilent p/n:
Carrier: Helium at 33.3 cm/sec, measured at 150°C
Oven:
60°C for 0.5 min
60-160°C at 20°/min
160-325°C at 10°/min
325-350°C at 25°/min
350°C for 5 min
Injector: Splitless, 250°C, 0.7 µL of EPA 525.2 standard
Detector: Ion Trap MS



Compound Name	m/z	RT
1. Hexachlorocyclopentadiene	237	07:07
2. Dimethylphthalate	163	08:22
3. Acenaphthylene	152	08:39
4. Acenaphthene-d10	164	08:55
5. 2-Chlorobiphenyl	188	08:57
6. Diethylphthalate	149	09:43
7. Fluorene	166	10:07
8. 2,3-Dichlorobiphenyl	222	11:09
9. Hexachlorobenzene	284	11:29
10. Simazine	201	11:31
11. Atrazine	200,215	11:33
12. Pentachlorophenol	266	11:56
13. Lindane	181	12:02
14. Phenanthrene-d10	188	12:19
15. Phenanthrene	178	12:23
16. Anthracene	178	12:32
17. 2,4,5-Trichlorobiphenyl	256	12:45
18. Alachlor	160	13:06
19. Heptachlor	100,160	13:19
20. Di-n-butylphthalate	149	13:29
21. 2,2',4,4'-Tetrachlorobiphenyl	292	13:57
22. Aldrin	66	14:01
23. Heptachlor epoxide	81,353	14:57
24. 2,2',3',4,6-Pentachlorobiphenyl	326	14:58
25. γ-Chlordane	375	15:39
26. α-Chlordane	375	15:45
27. trans-Nonachlor	409	15:52
28. Pyrene-d10	212	16:00
29. Pyrene	202	16:04
30. 2,2',3',4,6-Pentachlorobiphenyl	326	16:12
31. Endrin	81	16:49
32. Butylbenzylphthalate	149	17:25
33. Di(2-ethylhexyl)adipate	129	17:26
34. 2,2',3,3',4,5',6,6'-Octachlorobiphenyl	430	18:47
35. Methoxychlor	227	18:46
36. Di(2-ethylhexyl)phthalate	149	18:45
37. Benz[a]anthracene	228	19:15
38. Chrysene-d12	240	19:16
39. Chrysene	228	19:22
40. Benzo[b]fluoranthene	252	21:59
41. Benzo[k]fluoranthene	252	22:02
42. Benzo[a]pyrene	252	22:44
43. Perylene-d12	264	22:50
44. Dibenz[a,h]anthracene	278	24:54
45. Indeno[1,2,3-c,d]pyrene	276	24:56
46. Benzo[g,h,i]perylene	276	25:31



EPA Method 500 Series

Method 525.2 (Continued) Organic Compounds in Drinking Water by Liquid-Solid Extraction and Capillary GC/MS

These solutions are to be used individually or combined for calibration curve development. The Nitrogen Phosphorous Pesticides typically analyzed by NPD were combined into convenient solutions for possible use in other EPA methods such as 507. The Chlorinated Pesticides typically analyzed by ECD were combined into a convenient solution for use in this method or additional methods such as 505 or 508.1.

Nitrogen / Phosphorus Pesticide Mixture

M-525.2-NP1-ASL 1 x 1 mL
M-525.2-NP1-ASL-PAK 5 x 1 mL
 100 µg/mL each in Acetone 41 comps.

Alachlor	Ethoprop	Prometryne
Ametryn	Fenarimol	Pronamide
Atraton	Fluridone	Propachlor
Atrazine	Hexazinone	Propazine
Bromacil	Methyl paraoxon	Simetryn
Butachlor	Metolachlor	Tetrachlorvinphos
Butylate	Metribuzin	Tebuthiuron
Chlorpropham	Mevinphos	Terbacil
Dursban	MGK-264	Prebane
Cycloate	Molinate	Triadimefon
Cyanazine	Napropamide	Tricyclazole
Dichlorvos	Norflurazon	Trifluralin
Diphenamid	Pebulate	Vernolate
EPTC	Prometon	

Semi-Volatiles Mixture

M-525.2-SV-ASL 1 x 1 mL
M-525.2-SV-ASL-PAK 5 x 1 mL
 100 µg/mL each in Acetone 33 comps.

Acenaphthylene	2,4-Dinitrotoluene
Anthracene	2,6-Dinitrotoluene
Benz[a]anthracene	Fluorene
Benzo[b]fluoranthene	Hexachlorobenzene
Benzo[k]fluoranthene	2,2',4,4',5,6'-Hexachlorobiphenyl
Benzo[g,h,i]perylene	2,2',3,3',4,4',6-Heptachlorobiphenyl
Benzo[a]pyrene	Hexachlorocyclopentadiene
Benzyl butyl phthalate	Indeno[1,2,3-cd]pyrene
2-Chlorobiphenyl	Isophorone
Chrysene	2,2',3,3',4,5',6,6'-Octachlorobiphenyl
Dibenz[a,h]anthracene	2,2',3',4,6-Pentachlorobiphenyl
2,3-Dichlorobiphenyl	Pentachlorophenol (400 µg/mL)
bis(2-Ethylhexyl)adipate	Phenanthrene
bis(2-Ethylhexyl)phthalate	Pyrene
Diethyl phthalate	2,2',4,4'-Tetrachlorobiphenyl
Dimethyl phthalate	2,4,5-Trichlorobiphenyl
Dibutyl phthalate	

Nitrogen / Phosphorus Pesticide Mix Revision

M-525.2-NP1-ASL-R1 1 x 1 mL
 100 µg/mL each in Acetone 40 comps.

Alachlor	Ethoprop	Prometryne
Ametryn	Fenarimol	Pronamide
Atraton	Fluridone	Propachlor
Atrazine	Hexazinone	Propazine
Bromacil	Methyl paraoxon	Simetryn
Butachlor	Metolachlor	Tetrachlorvinphos
Butylate	Mevinphos	Tebuthiuron
Chlorpropham	MGK-264	Terbacil
Dursban	Molinate	Prebane
Cycloate	Napropamide	Triadimefon
Cyanazine	Norflurazon	Tricyclazole
Dichlorvos	Pebulate	Trifluralin
Diphenamid	Prometon	Vernolate
EPTC		

Regulated Semi-Volatiles Mixture

M-525-REG-ASL 1 x 1 mL
M-525-REG-ASL-PAK 5 x 1 mL
 0.5 mg/mL each in Acetone 6 comps.

Benzo[a]pyrene	Hexachlorobenzene
bis(2-Ethylhexyl)adipate	Hexachlorocyclopentadiene
bis(2-Ethylhexyl)phthalate	Pentachlorophenol (2.0 mg/mL)

ISTD/SS Fortification Solution

M-525.2-FS-ASL 1 x 1 mL
M-525.2-FS-ASL-PAK 5 x 1 mL
 500 µg/mL each in Acetone 7 comps.

Acenaphthene-d ₁₀	Phenanthrene-d ₁₀
Chrysene-d ₁₂	Pyrene-d ₁₀
1,3-Dimethyl-2-nitrobenzene	Triphenylphosphate
Perylene-d ₁₂	

Nitrogen / Phosphorus Pesticide Mixture

M-525.2-NP2-ASL 1 x 1 mL
M-525.2-NP2-ASL-PAK 5 x 1 mL
 100 µg/mL each in Acetone 6 comps.

Carboxin	Fenamiphos
Diazinon	Merphos
Disulfoton	Terbufos

Organochlorine Pesticides

M-525.2-CP-ASL 1 x 1 mL
M-525.2-CP-ASL-PAK 5 x 1 mL
 100 µg/mL each in Acetone 30 comps.

Alachlor	Dacthal	Etridiazole
Aldrin	p,p'-DDD	α-Chlordane
Atrazine	p,p'-DDE	γ-Chlordane
α-BHC	p,p'-DDT	Heptachlor
β-BHC	Dieldrin	Heptachlor epoxide (Isomer B)
δ-BHC	Endosulfan I	Methoxychlor
γ-BHC	Endosulfan II	cis-Permethrin
Chlorobenzilate	Endosulfan sulfate	trans-Permethrin
Chlorothalonil	Endrin	Simazine
Chloroneb	Endrin aldehyde	trans-Nonachlor

Match frequently requested products.

Alternate Source

ASL products can be used as an independent second source.

Surrogate Standard

M-525.2-SS2-ASL 1 x 1 mL
M-525.2-SS2-ASL-PAK 5 x 1 mL
 500 µg/mL each in Acetone 4 comps.

1,3-Dimethyl-2-nitrobenzene	Pyrene-d ₁₀
Perylene-d ₁₂	Triphenylphosphate

Regulated Semi-Volatiles Mixture

M-525-REG-EA 1 x 1 mL
 100 µg/mL each in Ethyl acetate 25 comps.
M-525-REG-EA-5X 1 x 1 mL
 500 µg/mL each in Ethyl acetate 25 comps.

Alachlor	Endrin
Aldrin	Heptachlor
Atrazine	Heptachlor epoxide (isomer B)
Benzo(a)pyrene	Hexachlorobenzene
Butachlor	Hexachlorocyclopentadiene
α-Chlordane	Lindane
γ-Chlordane	Methoxychlor
Cyanazine	Metolachlor
Dieldrin	Metribuzin
2,4-Dinitrotoluene	trans-Nonachlor
2,6-Dinitrotoluene	Propachlor
bis(2-Ethylhexyl)adipate	Simazine
bis(2-Ethylhexyl)phthalate	



Method 526 Semi-Volatiles by GC/MS

Primary Dilution Standard

M-526-0.2X-EA	SAVE	1 x 1 mL
M-526-0.2X-EA-PAK		5 x 1 mL
200 µg/mL each in Ethyl acetate		11 comps.
M-526		1 x 1 mL
M-526-PAK	SAVE	5 x 1 mL
1000 µg/mL each in Acetone		11 comps.

Acetochlor	Dyfonate
Cyanazine	Nitrobenzene
Diazinon	Prometon
2,4-Dichlorophenol	Terbufos
1,2-Diphenylhydrazine	2,4,6-Trichlorophenol
Disulfoton	

Internal/Surrogate Standards

M-526-IS/SS		1 x 1 mL
M-526-IS/SS-PAK	SAVE	5 x 1 mL
500 µg/mL each in Acetone		5 comps.

Acenaphthene-d ₁₀	Phenanthrene-d ₁₀
Chrysene-d ₁₂	Triphenylphosphate
1,3-Dimethyl-2-nitrobenzene	

M-525-TS-0.05X	1 x 1 mL
5 µg/mL in CH ₂ C ₂	
DFTPP	

Internal Standard

M-525.2-IS		1 x 1 mL
M-525.2-IS-PAK	SAVE	5 x 1 mL
500 µg/mL each in Acetone		3 comps.

Acenaphthene-d ₁₀	Phenanthrene-d ₁₀
Chrysene-d ₁₂	

Surrogate Standard

M-526-SS		1 x 1 mL
M-526-SS-PAK	SAVE	5 x 1 mL
500 µg/mL each in Acetone		2 comps.

1,3-Dimethyl-2-nitrobenzene	Triphenylphosphate
-----------------------------	--------------------

Method 527 Pesticides & Flame Retardants in Drinking Water by SPE & Capillary GC/MS

PBDE Standard

M-527-BDE	1 x 1 mL
50 µg/mL each in Isooctane:Ethyl Acetate (80:20)	5 comps.

2,2',4,4'-Tetrabromodiphenyl ether	2,2',4,4',5,5'-Hexabromodiphenyl ether
2,2',4,4',6-Pentabromodiphenyl ether	2,2',4,4',5,5'-Hexabromobiphenyl
2,2',4,4',5-Pentabromodiphenyl ether	

Pesticide Mix A

M-527-PEST-A	1 x 1 mL
500 µg/mL each in MeOH	11 comps.

Atrazine	Kepone
Bioallethrin, S-cyclopentyl isomer	Norflurazon
Bromacil	Oxychlorodane isomer
Esfenvalerate	Prometryne
Fenvalerate	Propazine
Hexazinone	

Pesticide Mix B

M-527-PEST-B	1 x 1 mL
500 µg/mL each in MeOH	12 comps.

Bifenthrin	Nitrofen
Dimethoate	Parathion
Dursban	Terbufos sulfone
Fenamiphos	Thiazopyr
Malathion	Thiobencarb
Mirex	Vinclozolin

Internal Standard

M-525.2-IS		1 x 1 mL
M-525.2-IS-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in Acetone		3 comps.

Acenaphthene-d ₁₀	Phenanthrene-d ₁₀
Chrysene-d ₁₂	

Surrogate Standard

M-525.2-SS	1 x 1 mL
0.5 mg/mL each in Acetone	3 comps.

1,3-Dimethyl-2-nitrobenzene	Triphenylphosphate
Perylene-d ₁₂	





EPA Method 500 Series

Method 528 Phenols by GC/MS

Stock Calibration Standard

M-528-CONC 1 x 1 mL
M-528-CONC-PAK 5 x 1 mL
2000 µg/mL each in CH₂Cl₂ 12 comps.

SAVE

4-Chloro-3-methylphenol	2-Methyl-4,6-Dinitrophenol
2-Chlorophenol	2-Nitrophenol
o-Cresol	4-Nitrophenol
2,4-Dichlorophenol	Pentachlorophenol
2,4-Dimethylphenol	Phenol
2,4-Dinitrophenol	2,4,6-Trichlorophenol

Internal Standard

M-528-IS 1 x 1 mL
M-528-IS-PAK 5 x 1 mL
At stated conc. in CH₂Cl₂ 2 comps.

SAVE

1,2-Dimethyl-3-nitrobenzene	(1000 µg/mL)
2,3,4,5-Tetrachlorophenol	(2000 µg/mL)

Peak Tailing Factor Standard

M-528-PTF 1 x 1 mL
M-528-PTF-PAK 5 x 1 mL
10 µg/mL each in CH₂Cl₂ 4 comps.

SAVE

2,4-Dimethylphenol	4-Nitrophenol
2-Methyl-4,6-dinitrophenol	Pentachlorophenol

Analyte Fortification Solution

M-528-AFS 1 x 1 mL
M-528-AFS-PAK 5 x 1 mL
At stated conc. in MeOH 12 comps.

SAVE

4-Chloro-3-methylphenol (100 µg/mL)	2-Methyl-4,6-Dinitrophenol (500 µg/mL)
2-Chlorophenol (100 µg/mL)	2-Nitrophenol (100 µg/mL)
o-Cresol (100 µg/mL)	4-Nitrophenol (500 µg/mL)
2,4-Dichlorophenol (100 µg/mL)	Pentachlorophenol (500 µg/mL)
2,4-Dimethylphenol (100 µg/mL)	Phenol (100 µg/mL)
2,4-Dinitrophenol (500 µg/mL)	2,4,6-Trichlorophenol (100 µg/mL)

Surrogate Standards

M-528-SS 1 x 1 mL
M-528-SS-PAK 5 x 1 mL
At stated conc. in MeOH 3 comps.

SAVE

2-Chlorophenol-d ₄	(1000 µg/mL)
2,4-Dimethylphenol-3,5,6-d ₃	(1000 µg/mL)
2,4,6-Tribromophenol	(2500 µg/mL)

M-528-SS2 1 x 1 mL
M-528-SS2-PAK 5 x 1 mL
At stated conc. in MeOH 3 comps.

SAVE

2-Chlorophenol-d ₄	(1000 µg/mL)
2,4-Dimethylphenol-3,5,6-d ₃	(1000 µg/mL)
2,4,6-Tribromophenol	(2000 µg/mL)

Method 529 Explosive & Related Compounds by SPE & Capillary Column GC/MS

Method 529 Calibration Curve

All in µg/mL in Ethyl acetate Storage Cond.: Freeze (<-10°C)

M-529-	01	02	03	04	05	06	07	08	09
2-Amino-4,6-dinitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
4-Amino-2,6-dinitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
3,5-Dinitroaniline	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
1,3-Dinitrobenzene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
2,4-Dinitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
2,6-Dinitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
RDX	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
Nitrobenzene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
2-Nitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
3-Nitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
4-Nitrotoluene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
1,3,5-Trinitrobenzene	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
Tetryl	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10
TNT	0.025	0.05	0.10	0.25	0.50	1.0	2.0	5.0	10

Full Scan MS Calibration Set

M-529-MS-SET 6 x 1 mL
M-529-03, M-529-05, M-529-06,
M-529-07, M-529-08, M-529-09

SIM Calibration Set

M-529-SIM-SET 7 x 1 mL
M-529-01, M-529-02, M-529-03, M-529-04,
M-529-05, M-529-06, M-529-07

Storage Condition.: Freeze (<-10°C)

Internal Standard Stock Solution

M-529-IS 1 x 1 mL
2.0 mg/mL Ethyl acetate
3,4-Dinitrotoluene

Internal Standard Fortification Solution

M-529-ISFS 1 x 1 mL
200 µg/mL Ethyl acetate:AcCN (96:4) 14 comps.

2-Amino-4,6-dinitrotoluene	Nitrobenzene
4-Amino-2,6-dinitrotoluene	2-Nitrotoluene
3,5-Dinitroaniline	3-Nitrotoluene
1,3-Dinitrobenzene	4-Nitrotoluene
2,4-Dinitrotoluene	1,3,5-Trinitrobenzene
2,6-Dinitrotoluene	Tetryl
RDX	TNT

Surrogate Analyte Stock Solutions

M-529-SS1 1 x 1 mL
M-529-SS1-PAK 5 x 1 mL
1000 µg/mL each in MeOH 2 comps.

SAVE

1,3,5-Trimethyl-2-nitrobenzene	1,2,4-Trimethyl-5-nitrobenzene
--------------------------------	--------------------------------

M-529-SS2 1 x 1 mL
M-529-SS2-PAK 5 x 1 mL
1000 µg/mL each in CH₂Cl₂

SAVE

Nitrobenzene-d₅

Surrogate Analyte Fortification Solution

M-529-SAFS 1 x 1 mL
100 µg/mL each in MeOH 3 comps.

1,3,5-Trimethyl-2-nitrobenzene	Nitrobenzene-d ₅
1,2,4-Trimethyl-5-nitrobenzene	



Method 531 + 531.1 N-Methyl carbamoyl oximes & N-Methyl carbamates by HPLC

M-531-SET set of 11 x 1 mL
Each at 0.1 mg/mL in AcCN Analytes listed below

Each at 0.1 mg/mL in AcCN	Cat. No.	1 mL
Aldicarb sulfoxide	M-531-01	
Aldicarb sulfone	M-531-02	
Oxamyl	M-531-03	
Methomyl	M-531-04	
3-Hydroxycarbofuran	M-531-05	
Aldicarb	M-531-06	
Propoxur	M-531-07	
Carbofuran	M-531-08	
Carbaryl	M-531-09	
1-Naphthol	M-531-10	
Methiocarb	M-531-11	

M-531M 1 x 1 mL
M-531M-PAK 5 x 1 mL
0.1 mg/mL each in AcCN 11 comps. **SAVE**

Performance Check Solution

M-531-QC-R 1 x 1 mL
At stated conc. in AcCN 4 comps.

Aldicarb sulfoxide (100 µg/mL)	3-Hydroxycarbofuran (2 µg/mL)
BDMC (10 µg/mL)	Methiocarb (20 µg/mL)

Internal Standard

M-531-IS 1 x 1 mL
0.1 mg/mL in AcCN

4-Bromo-3,5-dimethylphenyl N-methylcarbamate (BDMC)

Carbamate Pesticide Mix

M-531-REG-ASL 1 x 1 mL
M-531-REG-ASL-PAK 5 x 1 mL
100 µg/mL in MeOH 2 comps. **SAVE**

Carbofuran Oxamyl

Method 532 Phenylureas by HPLC

Phenylurea Concentrate Standard

M-532-CONC1 1 x 1 mL
M-532-CONC1-PAK 5 x 1 mL
5.0 mg/mL each in MeOH 6 comps. **SAVE**

Karmex	Propanil
Fluometuron	Siduron
Linuron	Tebuthiuron

Phenylurea Concentrate Standard

M-532-CONC2 1 x 1 mL
M-532-CONC2-PAK 5 x 1 mL
5.0 mg/mL each in Acetone 2 comps. **SAVE**

Diflubenzuron	Thidiazuron
---------------	-------------

Phenylurea Primary Dilution Standard

M-532 1 x 1 mL
M-532-PAK 5 x 1 mL
100 µg/mL each in MeOH, except Siduron 8 comps. **SAVE**

Diflubenzuron	Propanil
Karmex	Siduron (200 µg/mL)
Fluometuron	Tebuthiuron
Linuron	Thidiazuron

Phenylurea Surrogate Standard

M-532-SS 1 x 1 mL
M-532-SS-PAK 5 x 1 mL
500 µg/mL each in MeOH 2 comps. **SAVE**

Carbazole	Monuron
-----------	---------

Method 535 Acetanilide/Acetamide Herbicide Degradates

Ethanesulfonic acid (ESA) and oxanilic acid (OA) degradation products of acetanilide/acetamide herbicides have been found in U.S. ground waters and surface waters. The substitution of the sulfonic acid or the carbonic acid for the chlorine atom greatly increases the water solubility of degradates relative to the parent compound and contributes to the increased potential for leaching into groundwater. As a result, alachlor ESA and other acetanilide degradation products were listed on the 1998 Safe Drinking Water Act Contaminant Candidate List (CCL). One acetamide and five acetanilide herbicides are currently registered for agricultural use in the U.S. The next step in the CCL-process is to collect data on the concentrations and occurrence of these compounds in the nation's drinking water supplies. However, the existing analytical methods for measuring

M-535-SET 14 x 1 mL
At stated conc. in MeOH

Acetochlor ESA	50 µg/mL	Propachlor ESA	20 µg/mL
Acetochlor OA	50 µg/mL	Propachlor OA	20 µg/mL
Alachlor ESA	50 µg/mL	Dimethenamid ESA	10 µg/mL
Alachlor OA	50 µg/mL	Dimethenamid OA	10 µg/mL
Flufenacet ESA	20 µg/mL	Internal Standard	
Flufenacet OA	20 µg/mL	Butachlor ESA sodium salt	20 µg/mL
Metolachlor ESA	50 µg/mL	Surrogate Standard	
Metolachlor OA	50 µg/mL	Dimethachlor ESA sodium salt	20 µg/mL

chloroacetanilide degradates do not address issues specific to analyzing these compounds in drinking water. Because many of the methods were developed for ground water, dechlorination was not addressed nor was the method tested in all types of drinking water matrices. In addition, existing methods do not address all twelve ESA and OA degradates of the six U.S. registered acetanilide/acetamide herbicides. The focus of this research was to develop a sensitive and specific analytical method for the analysis of alachlor ESA and other chloroacetanilide degradates in drinking water.



EPA Method 500 Series

Method 547-551

Method 547 Glyphosate by HPLC

M-547	1 x 1 mL
0.1 mg/mL in Deionized water	
M-547-10X	1 x 1 mL
1.0 mg/mL in Deionized water	
Glyphosate	

Glyphosate Metabolite

M-547-02	1 x 1 mL
0.1 mg/mL in Deionized water	
Aminomethyl phosphonic acid (AMPA)	

Method 548 Endothall by GC/ECD

M-548A	1 x 1 mL
10 µg/mL in Deionized water	
M-548B	1 x 1 mL
50 µg/mL in Deionized water	
Endothall	

Internal Standard

M-548-IS	1 x 1 mL
10 µg/mL in MtBE	
Endosulfan I	

Calibration Standard

M-548-CAL	1 x 1 mL
100 µg/mL in MtBE	
Endothall pentafluorophenyl hydrazine derivative	

Method 548.1 Endothall by GC/MS

P-183S	1 x 1 mL
100 µg/mL in MeOH	
Endothall	

Internal Standard

M-548.1-IS	1 x 1 mL
500 µg/mL in MeOH	
Acenaphthene-d ₁₀	

Methyl Derivative

M-548.1-ME	1 x 1 mL
100 µg/mL in MeOH	
Dimethyl endothall	

Method 549.1/549.2 Diquat & Paraquat Liquid - Solid Extraction & HPLC

M-549.1	1 x 1 mL
1.0 mg/mL each in Deionized water as non-hydrated species	2 comps.
Diquat dibromide - H ₂ O (1.97 mg/mL)	
Paraquat dichloride - 4 H ₂ O (1.77 mg/mL)	

Method 550 + 550.1 PAHs by HPLC & Internal Standard

M-550-QC	1 x 1 mL
At stated conc. in AcCN	16 comps.
Acenaphthene (1000 µg/mL)	Chrysene (50 µg/mL)
Acenaphthylene (1000 µg/mL)	Dibenz[a,h]anthracene (10 µg/mL)
Anthracene (50 µg/mL)	Fluoranthene (2.5 µg/mL)
Benz[a]anthracene (1 µg/mL)	Fluorene (100 µg/mL)
Benzo[a]pyrene (5 µg/mL)	Indeno[1,2,3-cd]pyrene (10 µg/mL)
Benzo[b]fluoranthene (1 µg/mL)	Naphthalene (1000 µg/mL)
Benzo[g,h,i]perylene (5 µg/mL)	Phenanthrene (50 µg/mL)
Benzo[k]fluoranthene (1 µg/mL)	Pyrene (50 µg/mL)

Internal Standard

M-550-IS	1 x 1 mL
0.1 mg/mL in AcCN	
4,4'-Difluorobiphenyl	

Method 551 Chlorinated Organic Solvents + Trihalomethanes by GC/ECD

M-551A	1 x 1 mL
M-551A-PAK	5 x 1 mL
5.0 mg/mL each in MeOH	10 comps.
Bromodichloromethane	1,2-Dibromoethane
Bromoform	1,2-Dibromo-3-chloropropane
Carbon tetrachloride	Tetrachloroethene
Chlorodibromomethane	1,1,1-Trichloroethane
Chloroform	Trichloroethene

Disinfection By-products

M-551B	1 x 1 mL
5.0 mg/mL each in Acetone	8 comps.
M-551B-SET	set of 8 x 1 mL
Each at 5.0 mg/mL in Acetone	
	Cat. No.
Bromochloroacetonitrile	M-551B-1
Chloral hydrate	M-551B-2
Chloropicrin	M-551B-3
Dibromoacetonitrile	M-551B-4
Dichloroacetonitrile	M-551B-5
1,1-Dichloro-2-propanone	M-551B-6
Trichloroacetonitrile	M-551B-7
1,1,1-Trichloro-2-propanone	M-551B-8



Method 551.1A Chlorinated Solvents, Trihalomethanes Disinfection By-products & Halogenated Pesticides/Herbicides in Drinking Water by GC/ECD

Chlorinated Organic Solvents + Trihalomethanes

M-551.1A		1 x 1 mL
M-551.1A-PAK	SAVE	5 x 1 mL
<i>At stated conc. in Acetone</i>		12 comps.
Bromodichloromethane	(1000 µg/mL)	
Bromoform	(1000 µg/mL)	
Carbon tetrachloride	(500 µg/mL)	
Chloroform	(1000 µg/mL)	
Dibromochloromethane	(1000 µg/mL)	
1,2-Dibromo-3-chloropropane	(1000 µg/mL)	
1,2-Dibromoethane	(1000 µg/mL)	
Tetrachloroethene	(500 µg/mL)	
1,1,1-Trichloroethane	(1000 µg/mL)	
1,1,2-Trichloroethane	(10,000 µg/mL)	
Trichloroethene	(1000 µg/mL)	
1,2,3-Trichloropropane	(10,000 µg/mL)	

Disinfection By-products

M-551.1B		1 x 1 mL
M-551.1B-PAK	SAVE	5 x 1 mL
<i>1000 µg/mL each in Acetone</i>		8 comps.
Bromochloroacetonitrile	Dichloroacetonitrile	
Chloral hydrate	1,1-Dichloro-2-propanone	
Chloropicrin	Trichloroacetonitrile	
Dibromoacetonitrile	1,1,1-Trichloro-2-propanone	

Pesticide/Herbicide Mixture

M-551.1C		1 x 1 mL
M-551.1C-PAK	SAVE	5 x 1 mL
<i>At stated conc. in Acetone</i>		17 comps.
Alachlor	(10 µg/mL)	Hexachlorobenzene (1 µg/mL)
Atrazine	(200 µg/mL)	Hexachlorocyclopentadiene (1 µg/mL)
Bromacil	(10 µg/mL)	Lindane (1 µg/mL)
Cyanazine	(30 µg/mL)	Methoxychlor (5 µg/mL)
Endrin	(2 µg/mL)	Metolachlor (10 µg/mL)
Endrin aldehyde	(2 µg/mL)	Metribuzin (5 µg/mL)
Endrin ketone	(2 µg/mL)	Simazine (200 µg/mL)
Heptachlor	(1 µg/mL)	Trifluralin (1 µg/mL)
Heptachlor epoxide (isomer B)	(1 µg/mL)	

Technical Note

- Method 551.1A analytes are formulated into **3 separate solutions** to meet various analytical laboratory testing requirements. Each solution is intended for use as a stand-alone formulation or in combination with the other two solutions.
- Chloral hydrate** is a DEA schedule IV drug. AccuStandard has the necessary license and exemption approval to offer this analyte in a multi-component formulation. This multi-component formulation containing chloral hydrate is tested for stability. In addition, the solution is manufactured in small batches to insure the freshest product.

Using the 3 mixture version not only provides versatility but also eliminates running two separate 5 point calibration curves (one for the core analytes and a separate Chloral hydrate curve).

Method 551.1A Auxiliary Standards by ECD

Laboratory Performance Check Solutions

Pentane Extracts

M-551.1-LPC-P		1 x 1 mL
M-551.1-LPC-P-PAK	SAVE	5 x 1 mL
<i>At stated conc. in Pentane</i>		7 comps.
Alachlor	(83 µg/mL)	Hexachlorocyclopentadiene (20 µg/mL)
Bromacil	(83 µg/mL)	Lindane (0.2 µg/mL)
Bromodichloromethane	(30 µg/mL)	Trichloroethene (30 µg/mL)
Endrin	(30 µg/mL)	

MtBE Extracts

M-551.1-LPC		1 x 1 mL
M-551.1-LPC-PAK	SAVE	5 x 1 mL
<i>At stated conc. in MtBE</i>		7 comps.
Alachlor	(83 µg/mL)	Hexachlorocyclopentadiene (20 µg/mL)
Bromacil	(83 µg/mL)	Lindane (0.2 µg/mL)
Bromodichloromethane	(30 µg/mL)	Trichloroethene (30 µg/mL)
Endrin	(30 µg/mL)	

Internal Standard Solutions

M-551.1-IS		1 x 1 mL
M-551.1-IS-PAK	SAVE	5 x 1 mL
<i>100 µg/mL in Acetone</i>		
M-551.1-IS-100X		1 x 1 mL
M-551.1-IS-100X-PAK	SAVE	5 x 1 mL
<i>10,000 µg/mL in Acetone</i>		
<i>p-Bromofluorobenzene</i>		

Modified Laboratory Performance Check Solutions

Pentane Extracts

M-551.1-MLPC-P		1 x 1 mL
M-551.1-MLPC-P-PAK	SAVE	5 x 1 mL
<i>At stated conc. in Pentane</i>		4 comps.
γ-BHC	(0.2 µg/mL)	Hexachlorocyclopentadiene (20 µg/mL)
Bromodichloromethane	(30 µg/mL)	Trichloroethene (30 µg/mL)

MtBE Extracts

M-551.1-MLPC		1 x 1 mL
M-551.1-MLPC-PAK	SAVE	5 x 1 mL
<i>At stated conc. in MtBE</i>		4 comps.
γ-BHC	(0.2 µg/mL)	Hexachlorocyclopentadiene (20 µg/mL)
Bromodichloromethane	(30 µg/mL)	Trichloroethene (30 µg/mL)

Surrogate Standard Solutions

M-551.1-SS		1 x 1 mL
M-551.1-SS-PAK	SAVE	5 x 1 mL
<i>10 µg/mL in Acetone</i>		
M-551.1-SS-100X		1 x 1 mL
M-551.1-SS-100X-PAK	SAVE	5 x 1 mL
<i>1,000 µg/mL in Acetone</i>		
<i>Decafluorobiphenyl</i>		



EPA Method 500 Series

Method 552 Haloacetic Acids by ECD

Methyl Derivatives

M-552-R 1 x 1 mL
1.0 mg/mL each in MtBE 8 comps.
M-552-R-SET set of 8 x 1 mL
Each at 1.0 mg/mL in MtBE

	Cat. No.	1 mL
2,4-Dichloroanisole	M-552-R-01	
Methyl bromoacetate	M-552-R-02	
Methyl bromochloroacetate	M-552-R-03	
Methyl chloroacetate	M-552-R-04	
Methyl dibromoacetate	M-552-R-05	
Methyl dichloroacetate	M-552-R-06	
Methyl trichloroacetate	M-552-R-07	
2,4,6-Trichloroanisole	M-552-R-08	

Underivatized Analytes

M-552A-R 1 x 1 mL
1.0 mg/mL each in MtBE 8 comps.
M-552A-R-SET set of 8 x 1 mL
Each at 1.0 mg/mL in MtBE

	Cat. No.	1 mL
Bromoacetic acid	M-552A-R-01	
Bromochloroacetic acid	M-552A-R-02	
Chloroacetic acid	M-552A-R-03	
Dibromoacetic acid	M-552A-R-04	
Dichloroacetic acid	M-552A-R-05	
2,4-Dichlorophenol	M-552A-R-06	
Trichloroacetic acid	M-552A-R-07	
2,4,6-Trichlorophenol	M-552A-R-08	

Internal Standards

APP-9-208-10X 1 x 1 mL
APP-9-208-10X-PAK SAVE 5 x 1 mL
1.0 mg/mL in MeOH
1,2,3-Trichloropropane

M-552-IS 1 x 1 mL
M-552-IS-PAK SAVE 5 x 1 mL
5.0 mg/mL in MeOH
1,2-Dibromopropane

Surrogate Standards as Acids & Methyl esters

P-242S-10X 1 x 1 mL
P-242S-10X-PAK SAVE 5 x 1 mL
1.0 mg/mL in MeOH
3,5-Dichlorobenzoic acid

P-247S-10X 1 x 1 mL
P-247S-10X-PAK SAVE 5 x 1 mL
1.0 mg/mL in MeOH
3,5-Dichlorobenzoic acid methyl ester

M-552-SS 1 x 1 mL
M-552-SS-PAK SAVE 5 x 1 mL
20 mg/mL in MtBE
2,3-Dibromopropionic acid

M-552-SS-ME 1 x 1 mL
M-552-SS-ME-PAK SAVE 5 x 1 mL
20 mg/mL in MtBE
2,3-Dibromopropionic acid methyl ester

Method 552.1 Haloacetic Acids by ECD

Methyl Derivatives

M-552.1 1 x 1 mL
At stated conc. in MeOH 7 comps.
M-552.1-SET set of 7 x 1 mL
Each at stated conc. in MeOH

		Cat. No.	1 mL
Dalapon ME	(200 µg/mL)	M-552.1-01	
Methyl bromoacetate	(200 µg/mL)	M-552.1-02	
Methyl bromochloroacetate	(200 µg/mL)	M-552.1-03	
Methyl chloroacetate	(300 µg/mL)	M-552.1-04	
Methyl dibromoacetate	(100 µg/mL)	M-552.1-05	
Methyl dichloroacetate	(300 µg/mL)	M-552.1-06	
Methyl trichloroacetate	(100 µg/mL)	M-552.1-07	

Underivatized Analytes

M-552.1A 1 x 1 mL
At stated conc. in MeOH 7 comps.
M-552.1A-SET set of 7 x 1 mL
Each at stated conc. in MeOH

Dalapon	(200 µg/mL)
Bromoacetic acid	(200 µg/mL)
Bromochloroacetic acid	(200 µg/mL)
Chloroacetic acid	(300 µg/mL)
Dibromoacetic acid	(100 µg/mL)
Dichloroacetic acid	(300 µg/mL)
Trichloroacetic acid	(100 µg/mL)

Internal Standard

M-552.1-IS 1 x 1 mL
M-552.1-IS-PAK SAVE 5 x 1 mL
1.0 mg/mL in MtBE
1,2,3-Trichloropropane

Surrogate Standards

M-552.1-SS 1 x 1 mL
M-552.1-SS-PAK SAVE 5 x 1 mL
1.0 mg/mL in MtBE
2-Bromopropanoic acid

M-552.1-SS-ME 1 x 1 mL
M-552.1-SS-ME-PAK SAVE 5 x 1 mL
1.0 mg/mL in MtBE
Methyl 2-bromopropionate

Buy AccuPAKs™
Save 20-40% 5 x 1 mL





Method 552.2 Haloacetic Acids & Dalapon in Drinking Water by L-L extraction, Derivatization & GC by ECD

These convenient sets of 10 individual ampules for Method 552.2, each containing a single analyte or its methyl derivative, were formulated with both the acids & their methyl derivatives and with and without the surrogate.

Methyl Derivatives

Haloacetic Acid Methyl Derivatives without Surrogates

M-552.2-R1 1 x 1 mL
At stated conc. in MtBE 10 comps.
M-552.2-SET set of 10 x 1 mL
M-552.3-R1 1 x 1 mL
100 µg/mL each in MtBE

		Cat. No.	1 mL
Dalapon methyl ester	(40 µg/mL)	M-552.2-01	
Methyl bromoacetate	(40 µg/mL)	M-552.2-02	
Methyl bromochloroacetate	(40 µg/mL)	M-552.2-03	
Methyl bromodichloroacetate	(40 µg/mL)	M-552.2-04	
Methyl chloroacetate	(60 µg/mL)	M-552.2-05	
Methyl chlorodibromoacetate	(100 µg/mL)	M-552.2-06	
Methyl dibromoacetate	(20 µg/mL)	M-552.2-07	
Methyl dichloroacetate	(60 µg/mL)	M-552.2-08	
Methyl tribromoacetate	(200 µg/mL)	M-552.2-09 *	
Methyl trichloroacetate	(20 µg/mL)	M-552.2-10	

Haloacetic Acid Methyl Derivatives with Surrogate (Methyl-2,3-dibromopropionate)

M-552.2 1 x 1 mL
At stated conc. in MtBE 11 comps.
M-552.3 1 x 1 mL
100 µg/mL each in MtBE 11 comps.

Dalapon methyl ester	(40 µg/mL)
Methyl bromoacetate	(40 µg/mL)
Methyl bromochloroacetate	(40 µg/mL)
Methyl bromodichloroacetate	(40 µg/mL)
Methyl chloroacetate	(60 µg/mL)
Methyl chlorodibromoacetate	(100 µg/mL)
Methyl dibromoacetate	(20 µg/mL)
Methyl dichloroacetate	(60 µg/mL)
Methyl tribromoacetate	(200 µg/mL)
Methyl trichloroacetate	(20 µg/mL)
Methyl 2,3-dibromopropionate (Surr.)	(100 µg/mL)

Surrogate Standard - Haloacetic Acid Methyl Derivative

M-552.2-SS-ME 1 x 1 mL
1000 µg/mL in MtBE
Methyl 2,3-dibromopropionate

Laboratory Performance Check Solution

M-552.2-LPC 1 x 1 mL
M-552.2-LPC-PAK **SAVE** 5 x 1 mL
At stated conc. in MtBE 4 comps.

Methyl bromochloroacetate	(4 µg/mL)
Methyl chloroacetate	(6 µg/mL)
Methyl chlorodibromoacetate	(10 µg/mL)
Methyl 2,3-dibromopropionate	(10 µg/mL)

Working Level

M-552.2-LPC-WL-25ML 1 x 25 mL
M-552.2-LPC-WL-50ML 1 x 50 mL
At stated conc. in MtBE 4 comps.

Methyl bromochloroacetate	(0.004 µg/mL)
Methyl chloroacetate	(0.006 µg/mL)
Methyl chlorodibromoacetate	(0.010 µg/mL)
Methyl 2,3-dibromopropionate	(0.010 µg/mL)

Haloacetic Acids

Haloacetic Acid without Surrogate

M-552.2A-R1 1 x 1 mL
At stated conc. in MtBE 10 comps.
M-552.2A-SET set of 10 x 1 mL
M-552.3A-R1 1 x 1 mL
100 µg/mL each in MtBE

		Cat. No.	1 mL
Dalapon acid	(40 µg/mL)	M-552.2A-04	
Monobromoacetic acid	(40 µg/mL)	M-552.2A-07	
Bromochloroacetic acid	(40 µg/mL)	M-552.2A-01	
Bromodichloroacetic acid	(40 µg/mL)	M-552.2A-02	
Monochloroacetic acid	(60 µg/mL)	M-552.2A-08	
Chlorodibromoacetic acid	(100 µg/mL)	M-552.2A-03	
Dibromoacetic acid	(20 µg/mL)	M-552.2A-05	
Dichloroacetic acid	(60 µg/mL)	M-552.2A-06	
Tribromoacetic acid	(200 µg/mL)	M-552.2A-09	
Trichloroacetic acid	(20 µg/mL)	M-552.2A-10	

Haloacetic Acid Mix with Surrogate (2,3-Dibromopropionic acid)

M-552.2A 1 x 1 mL
At stated conc. in MtBE 11 comps.

Dalapon acid	(40 µg/mL)
Monobromoacetic acid	(40 µg/mL)
Bromochloroacetic acid	(40 µg/mL)
Bromodichloroacetic acid	(40 µg/mL)
Monochloroacetic acid	(60 µg/mL)
Chlorodibromoacetic acid	(100 µg/mL)
Dibromoacetic acid	(20 µg/mL)
Dichloroacetic acid	(60 µg/mL)
Tribromoacetic acid	(200 µg/mL)
Trichloroacetic acid	(20 µg/mL)
2,3-Dibromopropionic acid (Surr.)	(100 µg/mL)

Surrogate Standards - Haloacetic Acid

M-552.2-SS 1 x 1 mL
1000 µg/mL in MtBE
2,3-Dibromopropionic acid

M-552.2-SS2 1 x 1 mL
10 mg/mL in MtBE
2-Bromobutanoic acid

Internal Standard

M-552.2-IS 1 x 1 mL
1000 µg/mL in MtBE
1,2,3-Trichloropropane

* ColdPAK required to maintain integrity of product.



EPA Method 500 Series

Method 553 Benzidines & Nitrogen containing Pesticides by L-L or L-S Extraction & RP HPLC/Particle Beam/MS

Analytes

M-553 *		1 x 1 mL
<i>At stated conc. in AcCN:MeOH (50:50)</i>		13 comps.
Benzidine	(250 µg/mL)	3,3'-Dimethylbenzidine (350 µg/mL)
Benzoylprop ethyl	(350 µg/mL)	Diuron (450 µg/mL)
Caffeine	(300 µg/mL)	Linuron (1,300 µg/mL)
Carbaryl	(1,000 µg/mL)	Monuron (400 µg/mL)
o-Chlorophenyl thiourea	(750 µg/mL)	Rotenone (3,200 µg/mL)
3,3'-Dichlorobenzidine	(250 µg/mL)	Siduron (450 µg/mL)
3,3'-Dimethoxybenzidine	(750 µg/mL)	

Performance Check Solution

M-553-PC	1 x 1 mL
<i>0.1 mg/mL in AcCN</i>	
DFTPPO (Decafluorotriphenylphosphine oxide)	

* ColdPAK required to maintain integrity of product.

Method 554 Carbonyl Compounds as DNPH Derivatives by HPLC

Carbonyl Compounds

M-554-R1	1 x 1 mL
<i>1.0 mg/mL each in AcCN</i>	
Acetaldehyde	Heptanal
Butanal	Hexanal
Crotonaldehyde	Nonanal
Cyclohexanone	Octanal
Decanal	Pentanal
Formaldehyde	Propanal

DNPH Derivatives

M-554-DNPH	1 x 1 mL
<i>1.0 mg/mL each in MeOH:AcCN (95:5)</i>	
M-554-DNPH-SET	set of 12 x 1 mL
<i>Each at 1.0 mg/mL in MeOH:AcCN (95:5)</i>	

	Cat. No.	1 mL
Acetaldehyde-DNPH *	M-554-DNPH-01	
Butanal-DNPH	M-554-DNPH-02	
Crotonaldehyde-DNPH *	M-554-DNPH-03	
Cyclohexanone-DNPH	M-554-DNPH-04	
Decanal-DNPH	M-554-DNPH-05	
Formaldehyde-DNPH	M-554-DNPH-06	
Heptanal-DNPH	M-554-DNPH-07	
Hexanal-DNPH	M-554-DNPH-08	
Nonanal-DNPH	M-554-DNPH-09	
Octanal-DNPH	M-554-DNPH-10	
Pentanal-DNPH	M-554-DNPH-11	
Propanal-DNPH	M-554-DNPH-12	

Method 555 Chlorinated Acids by HPLC

Mix A

M-555A	1 x 1 mL
<i>1.0 mg/mL each in AcCN</i>	
Acifluorfen	Dicamba
Bentazon	Dichlorprop
Chloramben	Picloram
2,4-D	2,4,5-TP

Mix B

M-555B	1 x 1 mL
<i>1.0 mg/mL each in AcCN</i>	
2,4-DB	MCPP
3,5-Dichlorobenzoic acid	4-Nitrophenol
Dinoseb	Pentachlorophenol
MCPA	2,4,5-T

Method 556/556.1 Carbonyl Compounds by PFBHA Derivative with analysis by GC/ECD

Mix A

M-556-MIXA	1 x 1 mL
<i>1.0 mg/mL each in AcCN</i>	
Acetaldehyde	Heptanal
Benzaldehyde	Hexanal
Butanal	Nonanal
Crotonaldehyde	Octanal
Cyclohexanone	Pentanal
Decanal	Propanal
Formaldehyde	

Mix B

M-556-MIXB	1 x 1 mL
<i>1.0 mg/mL each in AcCN</i>	
Glyoxal	Methyl glyoxal

Technical Note

Difference between Method 556 & 556.1

This product (M-556) was designed to meet both versions of the carbonyl methods. The primary difference between method 556 and 556.1 is that crotonaldehyde has been removed from the analyte list in the 556.1 method. If you require a formulation without the crotonaldehyde, we can custom formulate a standard to meet your exact requirements.

Procedural Calibration Standard

M-556 is to be used as a procedural standard for calibration of the method. As a procedural calibration standard it should be carried through the entire extraction and derivatization procedure associated with the samples. The oxime derivatives are analyzed by GC/ECD.

We have the capability to manufacture the actual oxime derivatives if required.

Internal Standard

M-556-IS	1 x 1 mL
M-556-IS-PAK	5 x 1 mL
<i>10 mg/mL in Hexane</i>	
1,2-Dibromopropane	

Surrogate Standards

M-556-SS	1 x 1 mL
M-556-SS-PAK	5 x 1 mL
<i>20 µg/mL in AcCN</i>	
M-556-SS-100X	1 x 1 mL
M-556-SS-100X-PAK	5 x 1 mL
<i>2.0 mg/mL in AcCN</i>	
2',4',5'-Trifluoroacetophenone	

PFBHA Reagent

M-556-DER-10ML	1 x 10 mL
M-556-DER-10ML-PAK	5 x 10 mL
<i>15 mg/mL in Water</i>	
O-(2,3,4,5,6-Pentafluorobenzyl)hydroxylamine hydrochloride	

Working Level (Internal Standard)

M-556-IS-WL-5ML-VAP	10 x 5 mL
<i>400 µg/L in Hexane</i>	
1,2-Dibromopropane	

* ColdPAK required to maintain integrity of product.

Custom Services

Custom Synthesis

The AccuStandard Synthesis Department employs several PhD. Organic Chemists with many years of pertinent academic and industrial experience. The experienced staff has developed hundreds of pure chemical compounds for companies and governmental agencies around the world. The very well-equipped synthetic laboratory with significant analytical support has made many notable synthesis projects possible. We specialize in synthesizing chemicals of high purity to be used as reference standards, and also offer custom synthesis capability on milligram to kilogram scales.



Analytical Capabilities

- GC-MS, GC-FID, GC-ECD, GC-NPD
- HPLC, LC-MS
- ICP, ICP-MS
- access to more analytical instrumentation if necessary

Synthesis and Purification

- Milligram to Kilogram Glassware
- Inert Conditions Equipment
- High Performance Flash Chromatography
- Distillation Equipment - High Vacuum, Molecular (Kugelrohr), and Spinning Band Columns
- Preparative TLC
- Parr Pressure and Hydrogenation Reactor

Custom Synthesized Products

- PCBs (all 209 congeners), & hydroxy, methoxy, and methylsulfonyl metabolites
- Halo-Dibenzodioxins and Furans
- PBDEs (all 209 congeners) & hydroxy, methoxy, chloro metabolites
- Fluorinated PBDEs
- Other Brominated Flame Retardants
- PBBs
- PAHs, Nitro-PAHs, Methyl-PAHs
- Pesticides and metabolites
- Explosives and metabolites
- Nonyl- and Octylphenol Ethoxylates
- Mono- and Diester Phthalates
- Organophosphates
- Other Rare Chemicals

AccuStandard is renowned for its quick response to the needs for new compounds. The company's especially strong Synthesis Department allows the synthesis of important and unique products. Featured in its history of firsts are all of the 209 congeners of polychlorinated biphenyls (PCBs), 209 congeners of polybrominated diphenyl ethers (PBDEs) as well as many halogenated dioxins and dibenzofurans, PAHs, pesticides and fluorinated surrogates substituting the expensive isotopically labelled compounds.

Among the more recent introductions are the hydroxy and methoxy PBDE congeners, mixed bromo/chloro hydroxy and methoxy diphenyl ethers, organophosphate flame retardants, biofuels, plastic additives (AccuStandard authored the Handbook for the Chemical Analysis of Plastic and Polymer Additives published by CRC Press), EPA Method 535 pesticide derivatives and previously unavailable explosive standards.

Custom Formulations

With over 30,000+ custom and 10,000+ listed standards, there is a good chance that AccuStandard will have a standard to meet your needs. However, if your laboratory requires something specific, our Chemists will manufacture a Custom Standard to meet your unique requirements. Custom Standards are an economical and time saving way to have a Standard prepared for your individual needs.



Custom QC options

1. Gravimetric/Volumetric Certification: Each purity is measured gravimetrically and QC verified instrumentally (where available). Every component in the Standard is guaranteed to be within +/- 0.5% of the requested value unless otherwise stated on the Certificate of Analysis. The solutions are diluted to volume using Class A glassware. A Certificate of Analysis accompanies each Standard and documents the gravimetric values used.
2. Full Quantitative Certification: This QA/QC method includes extended GC analysis using both internal calibration standards plus statistical analysis. A data package containing analytical and gravimetric data can be provided if requested during the quotation phase (Organic Customs only).

Custom Packaging and Bulk Quantity Requirements

AccuStandard has the resources and equipment to meet your custom packaging requirements.

- Automated ampule filling & sealing 0.2 mL up to 20 mL and ampule sizes from 1 mL to 20 mL
- Quantities from 500 to over 500,000 ampules
- Homogeneity testing
- Amber ampules for added product stability
- Private labeling and packaging (OEM)

We can reduce your costs using the Cozzoli Auto Filling/Sealing Machine to package just the right size product for your application. OEM Standards - Privately labeled standards manufactured and tested to your specifications. Cold and under Nitrogen sealing available.





National Primary Drinking Water Standards

EPA Safe Drinking Water Act (SDWA) Amendment National Primary Drinking Water Standards

The Safe Drinking Water Act (SDWA) amendment of 1996 established a new charter for the Nation's public water systems. The Environmental Protection Agency sets standards for protecting the safety of drinking water. The regulatory section of this act eliminates the requirement for the EPA to regulate 25 additional contaminants every three years. Instead, every 5 years from enactment of the amendment, the EPA will determine whether or not to regulate at least 5 new contaminants from a list being published within 18 months of the enactment of the amendment. The following two pages of National Primary Drinking Water Standards are formulated to provide convenience and flexibility when analyzing regulated contaminants from the Drinking Water Priority list.

Volatiles

Phase I

VOCs

M-502C-07

2.0 mg/mL each in MeOH

1 x 1 mL
12 comps.

Benzene	1,4-Dichlorobenzene
Bromodichloromethane	1,2-Dichloroethane
Bromoform	1,1-Dichloroethylene
Carbon tetrachloride	1,1,1-Trichloroethane
Chloroform	Trichloroethylene
Dibromochloromethane	Vinyl chloride

Phase II

VOCs

M-502C-08

2.0 mg/mL each in MeOH

1 x 1 mL
12 comps.

Chlorobenzene	Styrene
1,2-Dichlorobenzene	Tetrachloroethylene
cis-1,2-Dichloroethylene	Toluene
trans-1,2-Dichloroethylene	o-Xylene
1,2-Dichloropropane	m-Xylene
Ethylbenzene	p-Xylene

Phase V

Additions

M-502C-10

2.0 mg/mL in MeOH

1 x 1 mL
3 comps.

Dichloromethane	1,1,2-Trichloroethane
1,2,4-Trichlorobenzene	

Phase VIB

Additions

M-502C-11

2.0 mg/mL each in MeOH

1 x 1 mL
7 comps.

Acrylonitrile	Hexachlorobutadiene
Bromomethane	1,1,1,2-Tetrachloroethane
cis-1,3-Dichloropropene *	1,2,3-Trichloropropane
trans-1,3-Dichloropropene **	* cis (1.06 x conc.)
	** trans (0.94 x conc.)

Combined Phase I, Phase II, Phase V

Volatiles

M-502-REG

M-502-REG-PAK

0.2 mg/mL each in MeOH

M-502-REG-10X

M-502-REG-10X-PAK

2.0 mg/mL each in MeOH

SAVE

SAVE

1 x 1 mL
5 x 1 mL
27 comps.
1 x 1 mL
5 x 1 mL
27 comps.

Benzene	1,2-Dichloropropane
Bromodichloromethane	Ethylbenzene
Bromoform	Styrene
Carbon tetrachloride	Tetrachloroethylene
Chlorobenzene	Toluene
Chloroform	1,2,4-Trichlorobenzene
Dibromochloromethane	1,1,1-Trichloroethane
1,2-Dichlorobenzene	1,1,2-Trichloroethane
1,4-Dichlorobenzene	Trichloroethylene
1,2-Dichloroethane	Vinyl chloride
1,1-Dichloroethylene	m-Xylene
cis-1,2-Dichloroethylene	o-Xylene
trans-1,2-Dichloroethylene	p-Xylene
Dichloromethane	

Method 504 EDB & DBCP

M-504

M-504-PAK

0.2 mg/mL each in MeOH

SAVE

1 x 1 mL
5 x 1 mL
2 comps.

1,2-Dibromoethane (EDB)	1,2-Dibromo-3-chloropropane (DBCP)
-------------------------	------------------------------------

Method Specific Individual Standards

Compounds	Method	Concentration	Cat. No.
Diquat	549.1	100 µg/mL in MeOH	P-231S
Endothall	548.1	100 µg/mL in MeOH	P-183S
Ethylene thiourea ††	509	0.1 mg/mL in 0.17 w/v DTT in Ethyl acetate	M-509
Glyphosate	547	100 µg/mL in H ₂ O	M-547
2,3,7,8-TCDD	525	500 µg/mL in Toluene	D-404S
Toxaphene	525	2.5 mg/mL in Acetone	M-525-5

Water Treatment Chemicals

Acrylamide	8032	1.0 mg/mL in MeOH	M-8032
Epichlorohydrin	8260B	2000 µg/mL in MeOH	M-8260B-02

†† Proposed Phase VIB Additions, 0.1% w/v DDT as a scavenger

Technical Note

If you require formulations with additional analytes found on the contaminant list, please contact our Technical Department.

National Primary Drinking Water Standards



EPA Safe Drinking Water Act (SDWA) Amendment National Primary Drinking Water Standards (continued)

Regulated Herbicide Mixture (Non-derivatized)

M-515-REG	1 x 1 mL
<i>At stated conc. in Acetone</i>	8 comps.
Acifluorfen ^{††} (100 µg/mL)	Dinoseb (200 µg/mL)
2,4-D (300 µg/mL)	Pentachlorophenol (100 µg/mL)
Dalapon (1000 µg/mL)	Picloram (100 µg/mL)
Dicamba ^{††} (100 µg/mL)	2,4,5-TP (100 µg/mL)

Regulated Herbicide Mixtures (Methyl Derivatives)

M-515-REG-ME	1 x 1 mL
<i>At stated conc. MtBE</i>	8 comps.
Acifluorfen methyl ester ^{††} (250 ng/mL)	Dinoseb methyl ether (500 ng/mL)
2,4-D methyl ester (500 ng/mL)	Pentachloroanisole (100 ng/mL)
Dalapon methyl ester (2000 ng/mL)	Picloram methyl ester (250 ng/mL)
Dicamba methyl ester ^{††} (500 ng/mL)	2,4,5-TP methyl ester (500 ng/mL)

M-515-REG-ME-1000X	1 x 1 mL
<i>At stated conc. MtBE</i>	8 comps.
Acifluorfen methyl ester ^{††} (250 µg/mL)	Dinoseb methyl ether (500 µg/mL)
2,4-D methyl ester (500 µg/mL)	Pentachloroanisole (100 µg/mL)
Dalapon methyl ester (2000 µg/mL)	Picloram methyl ester (250 µg/mL)
Dicamba methyl ester ^{††} (500 µg/mL)	2,4,5-TP methyl ester (500 µg/mL)

Regulated Semi-Volatiles Mixture

M-525-REG-EA	1 x 1 mL
<i>0.1 mg/mL each in Ethyl Acetate</i>	25 comps.
M-525-REG-EA-5X	1 x 1 mL
<i>0.5 mg/mL each in Ethyl Acetate</i>	25 comps.
Alachlor	Endrin
Aldrin [†]	Heptachlor
Atrazine	Heptachlor epoxide
Benzo[a]pyrene	Hexachlorobenzene
Butachlor [†]	Hexachlorocyclopentadiene
α-Chlordane	Lindane
γ-Chlordane	Methoxychlor
Cyanazine ^{††}	Metolachlor ^{††}
Dieldrin [†]	Metribuzin ^{††}
2,4-Dinitrotoluene ^{††}	<i>trans</i> -Nonachlor
2,6-Dinitrotoluene ^{††}	Propachlor [†]
bis(2-Ethylhexyl)adipate	Simazine
bis(2-Ethylhexyl)phthalate	
[†] Unregulated Additions	
^{††} Proposed Phase VIB Additions	

Regulated Pesticide Mixture

M-531-REG	1 x 1 mL
<i>0.1 mg/mL each in Acetonitrile</i>	8 comps.
Aldicarb	Carbofuran
Aldicarb sulfone	3-Hydrocarbofuran [†]
Aldicarb sulfoxide	Methomyl ^{††}
Carbaryl [†]	Oxamyl

Proposed Phase VIA Additions

Disinfectant By-products

Bromoform ^{††}	}	see Method 501 Total Trihalomethanes
Chloroform ^{††}		
Dibromochloromethane ^{††}		
Dichlorobromomethane ^{††}		
		Method 551, Chlorinated Solvents + Disinfectant By-products

Bromoacetic acid ^{††}	}	Haloacetic acids see Method 552.2
Chloroacetic acid ^{††}		
Dibromoacetic acid ^{††}		
Dichloroacetic acid ^{††}		
Trichloroacetic acid ^{††}		

Regulated Pesticide Mixture

M-508.1-ASL	1 x 1 mL
M-508.1-ASL-PAK	5 x 1 mL
<i>100 µg/mL each in MtBE</i>	17 comps.
Alachlor	Heptachlor epoxide (Isomer B)
Aldrin	Hexachlorobenzene
Atrazine	Hexachlorocyclopentadiene
γ-BHC	Methoxychlor
α-Chlordane	Metolachlor
γ-Chlordane	Metribuzin
Dieldrin	Propachlor
Endrin	Simazine
Heptachlor	

Regulated Semi-Volatiles Mixture

M-525-REG-ASL	1 x 1 mL
M-525-REG-ASL-PAK	5 x 1 mL
<i>0.5 mg/mL each in Acetone</i>	6 comps.
Benzo[a]pyrene	Hexachlorobenzene
bis(2-Ethylhexyl)adipate	Hexachlorocyclopentadiene
bis(2-Ethylhexyl)phthalate	Pentachlorophenol (2.0 mg/mL)

Carbamate Pesticide Mixture

M-531-REG-ASL	1 x 1 mL
M-531-REG-ASL-PAK	5 x 1 mL
<i>100 µg/mL each in MeOH</i>	2 comps.
Carbofuran	Oxamyl

Match frequently requested products.

Alternate Source

ASL products can be used as an independent second source.



EPA Consent Decree

Water Protocol

Water Protocol EPA Consent Decree

Purgeable A

M-001A 1 x 1 mL
0.2 mg/mL each in MeOH 11 comps.

Carbon tetrachloride
Chlorobenzene
Chloroform
Dibromochloromethane
1,1-Dichloroethane
1,1-Dichloroethylene
1,2-Dichloropropane
Methylene chloride
Tetrachloroethylene
1,1,2-Trichloroethane
Trichloroethylene

Purgeable B

M-001B-R 1 x 1 mL
0.2 mg/mL each in MeOH 13 comps.

Benzene
Bromodichloromethane
Bromoform
2-Chloroethyl vinyl ether
1,2-Dichloroethane
trans-1,2-Dichloroethylene
cis-1,3-Dichloropropene *
trans-1,3-Dichloropropene **
Ethylbenzene
1,1,2,2-Tetrachloroethane
Toluene
1,1,1-Trichloroethane
Trichlorofluoromethane

* *cis* (1.06 x conc.)
** *trans* (0.94 x conc.)

Purgeable C (Gases)

M-001C 1 x 1 mL
0.2 mg/mL each in MeOH 5 comps.

Bromomethane
Chloroethane
Chloromethane
Dichlorodifluoromethane
Vinyl chloride

Base/Neutral 1

M-001D 1 x 1 mL
At stated conc. in MeOH
M-001D-D 1 x 1 mL
At stated conc. in CH₂Cl₂ 12 comps.

Acenaphthylene (0.2 mg/mL)
Benzo[b]fluoranthene (0.1 mg/mL)
4-Bromophenyl phenyl ether (0.2 mg/mL)
bis(2-Chloroethyl) ether (0.2 mg/mL)
bis(2-Chloro-1-methylethyl) ether (0.2 mg/mL)
1,4-Dichlorobenzene (0.2 mg/mL)
3,3-Dichlorobenzidine (0.2 mg/mL)
Dimethyl phthalate (0.2 mg/mL)
Di-n-butyl phthalate (0.2 mg/mL)
2,6-Dinitrotoluene (0.2 mg/mL)
bis(2-Ethylhexyl)phthalate (0.2 mg/mL)
Nitrobenzene (0.2 mg/mL)

Base/Neutral 2

M-001E 1 x 1 mL
At stated conc. in MeOH
M-001E-D 1 x 1 mL
At stated conc. in CH₂Cl₂ 15 comps.

Acenaphthene (0.2 mg/mL)
Anthracene (0.2 mg/mL)
Benz[a]anthracene (0.1 mg/mL)
Chrysene (0.1 mg/mL)
Dibenz[a,h]anthracene (0.1 mg/mL)
1,2-Dichlorobenzene (0.2 mg/mL)
1,3-Dichlorobenzene (0.2 mg/mL)
Diethyl phthalate (0.2 mg/mL)
2,4-Dinitrotoluene (0.2 mg/mL)
Fluorene (0.2 mg/mL)
Hexachlorobenzene (0.2 mg/mL)
Hexachlorobutadiene (0.2 mg/mL)
Naphthalene (0.2 mg/mL)
bis(2-Chloroethoxy)methane (0.2 mg/mL)
Pyrene (0.1 mg/mL)

Base/Neutral 3

M-001F-D 1 x 1 mL
At stated conc. in CH₂Cl₂ 11 comps.

Butyl benzyl phthalate (0.2 mg/mL)
2-Chloronaphthalene (0.2 mg/mL)
1,2-Diphenylhydrazine (0.2 mg/mL)
Fluoranthene (0.1 mg/mL)
Hexachlorocyclopentadiene (0.2 mg/mL)
Hexachloroethane (0.2 mg/mL)
Isophorone (0.2 mg/mL)
N-Nitroso-*di-n*-propylamine (0.2 mg/mL)
N-Nitrosodiphenylamine (0.2 mg/mL)
Phenanthrene (0.2 mg/mL)
1,2,4-Trichlorobenzene (0.2 mg/mL)

Base/Neutral 4

M-001G 1 x 1 mL
At stated conc. in MeOH:CH₂Cl₂(50:50)
M-001G-D 1 x 1 mL
At stated conc. in CH₂Cl₂ 9 comps.

Benidine (0.2 mg/mL)
Benzo[k]fluoranthene (0.1 mg/mL)
Benzo[g,h,i]perylene (0.1 mg/mL)
Benzo[a]pyrene (0.1 mg/mL)
2-Chloroethyl vinyl ether (0.2 mg/mL)
4-Chlorophenylphenyl ether (0.2 mg/mL)
Di-*n*-octyl phthalate (0.2 mg/mL)
Indeno[1,2,3-*cd*]pyrene (0.1 mg/mL)
N-Nitrosodimethylamine (0.2 mg/mL)

Pesticide Mixture

M-001H 1 x 1 mL
At stated conc. in MeOH 16 comps.

Aldrin (0.1 mg/mL)
α-BHC (0.1 mg/mL)
β-BHC (0.1 mg/mL)
γ-BHC (0.1 mg/mL)
δ-BHC (0.1 mg/mL)
p,p'-DDT (0.6 mg/mL)
p,p'-DDE (0.2 mg/mL)
p,p'-DDD (0.6 mg/mL)
Dieldrin (0.2 mg/mL)
Endosulfan I (0.2 mg/mL)
Endosulfan II (0.2 mg/mL)
Endosulfan sulfate (0.6 mg/mL)
Endrin (0.2 mg/mL)
Endrin aldehyde (0.6 mg/mL)
Heptachlor (0.1 mg/mL)
Heptachlor epoxide (0.1 mg/mL)

Phenol Mixture

M-001P 1 x 1 mL
At stated conc. in MeOH
M-001P-D 1 x 1 mL
1.0 mg/mL each in CH₂Cl₂ 11 comps.

4-Chloro-3-methylphenol (2.5 mg/mL)
2-Chlorophenol (0.5 mg/mL)
2,4-Dichlorophenol (0.5 mg/mL)
2,4-Dimethylphenol (0.5 mg/mL)
2,4-Dinitrophenol (1.5 mg/mL)
2-Nitrophenol (0.5 mg/mL)
4-Nitrophenol (2.5 mg/mL)
2-Methyl-4,6-dinitrophenol (2.5 mg/mL)
Pentachlorophenol (2.5 mg/mL)
Phenol (0.5 mg/mL)
2,4,6-Trichlorophenol (1.5 mg/mL)

Polychlorinated Biphenyls

Each Aroclor® is a mixture of numerous comps., and considerable overlap in composition occurs between Aroclors.
Both at 0.2 mg/mL each in MeOH

Aroclor Mix 1

M-001K 1 x 1 mL
Aroclor 1016 Aroclor 1248
Aroclor 1232 Aroclor 1260

Aroclor Mix 2

M-001L 1 x 1 mL
Aroclor 1221 Aroclor 1254
Aroclor 1242

Chlordane & Toxaphene

M-001J 1 x 1 mL
At stated conc. in MeOH 2 comps.
Chlordane (0.02 mg/mL)
Toxaphene (0.20 mg/mL)

Acrolein & Acrylonitrile

M-603 1 x 1 mL
1.0 mg/mL each in H₂O 2 comps.

Internal Standard - Anthracene-d₁₀

M-001N 1 x 1 mL
2.0 mg/mL in CH₂Cl₂

Used as a GC/MS internal standard in the analysis of the base/neutral extractables.

M-001R 1 x 1 mL
20 mg/mL each in MeOH 3 comps.

Bromochloromethane
1,4-Dichlorobutane
2-Bromo-1-chloropropane

Recommended for use as internal standards for purgeables.

Complete Water Standard Kit

Z-009-R-SET

15 x 1 mL
(M-001A,M-001B-2,M-001C,M-001D,M-001E,M-001F,M-001G,M-001H,M-001P,M-001K,M-001L,M-001J,M-603A,M-001N,M-001R)

Purgeable A
Purgeable B
Purgeable C (Gases)

Base/Neutral 1
Base/Neutral 2
Base/Neutral 3
Base/Neutral 4

Pesticide Mixture
Phenol Mixture
Chlordane & Toxaphene
Aroclor Mix 1
Aroclor Mix 2

Acrolein-Acrylonitrile
Anthracene-d₁₀
Internal Standard

Standard Mixtures for EPA 600 Series

For Waste Water



Background Information

The EPA Methods for evaluating municipal and industrial wastewater pollutants are designated in the EPA 600 Series. This Series of methods evolved from the 1976 agreement by the EPA to study and, if necessary, to regulate 65 "priority pollutants." Several laboratories within the EPA collaborated on research projects that led to the 600 Series Methods.

Methods 601-612 were first published in 1979, along with a GC/MS method for the measurement of TCDD. AccuStandard followed the expansion of the 600 series methods by formulating analytical standards for additional 600 series methods listed in the EPA book "Methods for the Determination of Nonconventional Pesticides in Municipal and Industrial Wastewater."

The 600 Series product line contains standards used in the proposed and promulgated methods for the identification and quantification of organic compounds in municipal and industrial waste water. The organic compounds listed in the various methods include volatile organic compounds (VOCs), pesticides and synthetic organic compounds (SOCs).

Instrumentation

Analytical techniques used in the identification and quantification of the above compounds include gas chromatography with selective detectors (PID, ELCD, ECD, FID, NPD, FPD), gas chromatography/mass spectrometry (GC/MS) and high performance liquid chromatography (HPLC). The 600 series methods typically utilize packed columns, but chromatographic conditions can be modified (i.e. incorporation of advances in technology like capillary columns) if the modifications do not decrease the accuracy or lessen the precision of the method.

Comprehensive

Complete analysis of the target compounds by these 600 Series Methods can be accomplished using the series of standards formulated by AccuStandard for each method along with the suggested internal and surrogate standards. Formulations have been developed as easy to use large core mixes containing the target compounds and as high concentration sub-mixes for combination with other formulations to meet laboratory specific analyte detection requirements.

Match frequently requested products.

Alternate Source

ASL products can be used as an independent second source.

Methods 601, 608, 615

Thousands of Standards,
just a click away



AccuStandard.com

Method #	Method Descriptions	169-180
601	Purgeable Halocarbons (ELCD)	170-171
601/602	Purgeable Aromatics (ELCD)	171
603	Acrolein & Acrylonitrile (FID)	172
604	Phenols (FID), Phenols as PFB Derivatives (ECD)	172
604.1	Hexachlorophene & Dichloroprene (HPLC)	172
605	Benzidines (HPLC)	172
606	Phthalate Esters (ECD)	172
607	Nitrosamines (NPD)	172
608	Pesticides & PCBs (ECD)	172
608.1, 608.2	Pesticides (ECD)	173
609	Nitroaromatics & Isophorone (ECD/FID)	173
610	Polynuclear Aromatic Hydrocarbons (FID/HPLC)	173
611	Haloethers (ECD/ELCD)	173
612	Chlorinated Hydrocarbons (ECD)	173
613	Dioxin (2,3,7,8-TCDD) (GC/MS)	173
614, 614.1	Organophosphorus Pesticides (NPD)	173
615	Chlorinated Herbicides (ECD)	174
617	Chlorinated Pesticides & PCBs (ECD)	174
618	Volatile Pesticides (ECD)	174
619	Triazine Herbicides (NPD)	174
620	Diphenylamine (NPD)	174
622	Organophosphorus Pesticides (NPD)	174
622.1	Thiophosphate Pesticides (NPD)	175
624	Purgeable Volatiles (GC/MS)	175
625	BN/A Semivolatiles, Pesticides, Aroclors (GC/MS)	176-176
627	Dinitroaniline Pesticides (ECD)	179
629	Cyanazine (HPLC)	180
631	Carbendazim (HPLC)	180
632	Carbamates & Urea Pesticides (HPLC)	179
632.1	Carbamates & Amides (HPLC)	179
633	Organonitrogen Pesticides (NPD)	179
634	Thiocarbamate Pesticides (NPD)	179
635	Rotenone (HPLC)	180
636	Bensulide (HPLC)	180
638	Oryzalin (HPLC)	180
639	Bendiocarb (HPLC)	180
640	Mercaptobenzothiazole (HPLC)	180
641	Thiabendazole (HPLC)	180
642	Biphenyl & Phenylphenol (HPLC)	180
643	Bentazon (HPLC)	180
644	Picloram (HPLC)	180
645	Amine Pesticides & Lethane (NPD)	180
680	Pesticides & PCB Congeners (GC/MS)	180



EPA Method 600 Series

Method 601 Purgeable Halocarbons by Purge & Trap - GC/MS

Liquids

M-601A		1 x 1 mL
M-601A-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
M-601A-10X		1 x 1 mL
M-601A-10X-PAK	SAVE	5 x 1 mL
20 mg/mL each in MeOH		18 comps.

Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropylene *
Chlorobenzene	<i>trans</i> -1,3-Dichloropropylene **
1,2-Dichlorobenzene	Methylene chloride
1,3-Dichlorobenzene	1,1,2,2-Tetrachloroethane
1,4-Dichlorobenzene	Tetrachloroethylene
1,1-Dichloroethane	1,1,1-Trichloroethane
1,2-Dichloroethane	1,1,2-Trichloroethane
1,1-Dichloroethylene	Trichloroethylene
<i>trans</i> -1,2-Dichloroethylene	
1,2-Dichloropropane	* <i>cis</i> (1.06 x conc.)
	** <i>trans</i> (0.94 x conc.)

Gases

M-502B		1 x 1 mL
M-502B-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
M-502B-10X		1 x 1 mL
M-502B-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		6 comps.

Bromomethane	Dichlorodifluoromethane
Chloromethane	Trichlorofluoromethane
Chloroethane	Vinyl chloride

Liquid Component

M-601C *		1 x 1 mL
M-601C-PAK *	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
M-601C-10X *		1 x 1 mL
M-601C-10X-PAK *	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		
2-Chloroethylvinyl ether		

Trihalomethanes

M-501		1 x 1 mL
M-501-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
M-501-10X		1 x 1 mL
2.0 mg/mL each in MeOH		4 comps.

Bromoform	Dichlorobromomethane
Chloroform	Dibromochloromethane

Purgeable Halocarbon Sets

M-601-SET *		4 x 1 mL
0.2 mg/mL each in MeOH	(M-601A, M-502B, M-601C, M-501)	
M-601-10X-SET *		4 x 1 mL
2.0 mg/mL each in MeOH	(M-601A-10X, M-502B-10X, M-601C-10X, M-501-10X)	

Technical Note

Bromoform, Chloroform and other light volatiles may exhibit reduced response from a contaminated trap, un-optimized purge & trap conditions, i.e. purge flow too high / low, or contamination / cold spot in the transfer line.

* ColdPAK required to maintain integrity of product.

Purgeable Internal Standards

M-001R		1 x 1 mL
M-001R-PAK	SAVE	5 x 1 mL
20 mg/mL each in MeOH		3 comps.

Bromochloromethane	2-Bromo-1-chloropropane
1,4-Dichlorobutane	

Purgeable Halocarbon Mix

M-601-ASL		1 x 1 mL
M-601-ASL-PAK	SAVE	5 x 1 mL
100 µg/mL each in MeOH		28 comps.

Bromodichloromethane	1,2-Dichloroethane
Bromoform	1,1-Dichloroethene
Bromomethane	<i>trans</i> -1,2-Dichloroethene
Carbon tetrachloride	1,2-Dichloropropane
Chlorobenzene	<i>cis</i> -1,3-Dichloropropene
Chloroethane	<i>trans</i> -1,3-Dichloropropene
Chloroform	Dichloromethane
Chloromethane	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,2-Dichlorobenzene	1,1,1-Trichloroethane
1,3-Dichlorobenzene	1,1,2-Trichloroethane
1,4-Dichlorobenzene	Trichloroethene
Dichlorodifluoromethane	Trichlorofluoromethane
1,1-Dichloroethane	Vinyl chloride

Performance Check Solution

S-532-ASL		1 x 1 mL
S-532-ASL-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		8 comps.

Benzene	1,1-Dichloroethene
Carbon tetrachloride	1,1,1-Trichloroethane
1,4-Dichlorobenzene	Trichloroethene
1,2-Dichloroethane	Vinyl chloride

Technical Note

2 alternate approaches to perform Method 601 analysis:

Option 1 Use of the 4 ampule set (M-601) allows you to differentiate the more volatile analytes (M-502B) or less stable analytes (M-601C) and the THMs from the stable Method 601 liquids, which can then be ordered less frequently to optimize economy.

Option 2 The M-601-ASL formulation will serve as a convenient single injection standard for all analytes other than 2-chloroethylvinyl ether. It can also be used as a second source or QC standard.

Buy AccuPAKs™
Save 20-40% 5 x 1 mL





Method 601/602 Purgeable Halocarbons by GC/MS

Purgeable Halocarbons & Aromatics

M-601/602		1 x 1 mL
M-601/602-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		25 comps.
Benzene	1,2-Dichloropropane	
Bromoform	cis-1,3-Dichloropropylene *	
Carbon tetrachloride	trans-1,3-Dichloropropylene **	
Chlorobenzene	Ethylbenzene	
Chloroform	Methylene chloride	
Dibromochloromethane	1,1,2,2-Tetrachloroethane	
1,2-Dichlorobenzene	Tetrachloroethylene	
1,3-Dichlorobenzene	Toluene	
1,4-Dichlorobenzene	1,1,1-Trichloroethane	
Dichlorobromomethane	1,1,2-Trichloroethane	
1,1-Dichloroethane	Trichloroethylene	
1,2-Dichloroethane		
1,1-Dichloroethylene		
trans-1,2-Dichloroethylene		

* cis (1.06 x conc.)
** trans (0.94 x conc.)

Gases

M-601B		1 x 1 mL
M-601B-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		6 comps.
Bromomethane	Dichlorodifluoromethane	
Chloromethane	Trichlorofluoromethane	
Chloroethane	Vinyl chloride	

Liquids

M-601C *		1 x 1 mL
M-601C-PAK *	SAVE	5 x 1 mL
0.2 mg/mL in MeOH		
M-601C-10X *		1 x 1 mL
M-601C-10X-PAK *	SAVE	5 x 1 mL
2.0 mg/mL in MeOH		
2-Chloroethylvinyl ether		

Purgeable Aromatics

M-602		1 x 1 mL
M-602-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		7 comps.
Benzene	1,4-Dichlorobenzene	
Chlorobenzene	Ethylbenzene	
1,2-Dichlorobenzene	Toluene	
1,3-Dichlorobenzene		

Purgeable Aromatics - Gasoline ID

M-602-GAS		1 x 1 mL
M-602-GAS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
M-602-GAS-10X		1 x 1 mL
M-602-GAS-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		11 comps.
Benzene	Toluene	
Chlorobenzene	o-Xylene	
1,2-Dichlorobenzene	p-Xylene	
1,3-Dichlorobenzene	m-Xylene	
1,4-Dichlorobenzene	MtBE	
Ethylbenzene		

Surrogate Standard

M-602-SS		1 x 1 mL
M-602-SS-PAK	SAVE	5 x 1 mL
0.2 mg/mL in MeOH		
M-602-SS-100X		1 x 1 mL
20 mg/mL in MeOH		
α,α,α-Trifluorotoluene		

Combined 601/602 Purgeable Halocarbon & Aromatic Gasoline ID Mixture with MtBE

M-601-CHG		1 x 1 mL
M-601-CHG-PAK	SAVE	5 x 1 mL
100 µg/mL each in MeOH		35 comps.
Benzene	1,2-Dichloropropane	
Bromodichloromethane	cis-1,3-Dichloropropene *	
Bromoform	trans-1,3-Dichloropropene **	
Bromomethane	Dichloromethane	
Carbon tetrachloride	Ethylbenzene	
Chlorobenzene	MtBE	
Chloroethane	1,1,2,2-Tetrachloroethane	
Chloroform	Tetrachloroethene	
Chloromethane	Toluene	
Dibromochloromethane	1,1,1-Trichloroethane	
1,2-Dichlorobenzene	1,1,2-Trichloroethane	
1,3-Dichlorobenzene	Trichloroethene	
1,4-Dichlorobenzene	Trichlorofluoromethane	
Dichlorodifluoromethane	m-Xylene	
1,1-Dichloroethane	o-Xylene	
1,2-Dichloroethane	p-Xylene	
1,1-Dichloroethene	Vinyl chloride	
trans-1,2-Dichloroethene		

* cis (1.06 x conc.)
** trans (0.94 x conc.)

Technical Note

AccuStandard designed two sets of formulations for those laboratories analyzing Method 601/602 analytes by PID/HALL in series allowing for simultaneous screening for gasoline contamination:

M-601/602 The first set of formulations provide the analytical chemist with the method analytes in a core mix of liquids and a separate mix of the more volatile gases. By providing the six gases in a separate solution the chemist can replace the volatile gases on a more frequent basis.

M-601-CHG The second formulation has the Method 601/602 analytes plus the oxygenate MtBE in one convenient solution. Since the oxygenate MtBE is added to gasoline, its presence on a chromatogram can provide early detection of gasoline contamination at the monitoring well.

Target Analytes

M-601/602/BTEX		1 x 1 mL
0.2 mg/mL each in MeOH		
M-601/602/BTEX-10X		1 x 1 mL
2.0 mg/mL each in MeOH		26 comps.
Benzene	1,1,1-Trichloroethane	
Carbon tetrachloride	1,1,2,2-Tetrachloroethane	
Chlorobenzene	1,1,2-Trichloroethane	
Ethylbenzene	1,1-Dichloroethane	
Methyl-t-butyl ether	1,1-Dichloroethene	
Methylene chloride	1,2-Dichlorobenzene	
Tetrachloroethene	1,2-Dichloroethane	
Toluene	1,2-Dichloropropane	
Trichloroethene	o-Xylene	
cis-1,3-Dichloropropene	m-Xylene	
cis-1,2-Dichloroethene	p-Xylene	
trans-1,2-Dichloroethene	1,3-Dichlorobenzene	
trans-1,3-Dichloropropene	1,4-Dichlorobenzene	

Technical Note

Tetrachloroethane and 1,1-Dichloroethane can degrade on contaminated purge & trap transfer lines or old traps.

Gasoline Oxygenate - MtBE

S-078		1 x 1 mL
200 µg/mL in MeOH		
S-078-10X		1 x 1 mL
2.0 mg/mL in MeOH		
Methyl t-butyl ether (MtBE)		

* ColdPAK required to maintain integrity of product.



EPA Method 600 Series

Method 603 Acrolein & Acrylonitrile by GC/FID

M-603		1 x 1 mL
M-603-PAK	SAVE	5 x 1 mL
1.0 mg/mL each in Water		2 comps.
M-603-10X		1 x 1 mL
10 mg/mL each in Water		2 comps.
M-603-M-0.1X *		1 x 1 mL
0.1 mg/mL each in MeOH:Water 90:10		2 comps.
M-603-M-5X *		1 x 1 mL
5.0 mg/mL each in MeOH:Water 90:10		2 comps.
Acrolein	Acrylonitrile	

Method 604 Phenols by GC/FID

M-604		1 x 1 mL
M-604-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in MeOH		11 comps.
4-Chloro-3-methylphenol	2,4-Dinitrophenol	Pentachlorophenol
2-Chlorophenol	2-Methyl-4,6-dinitrophenol	Phenol
2,4-Dichlorophenol	2-Nitrophenol	2,4,6-Trichlorophenol
2,4-Dimethylphenol	4-Nitrophenol	

Surrogate Standard

M-604-SS		1 x 1 mL
M-604-SS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
2,4,6-Tribromophenol		

Phenol as Pentafluorobenzyl Derivatives by GC/ECD

M-604-PFB		1 x 1 mL
M-604-PFB-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		11 comps.
4-Chloro-3-methylphenol	2,4-Dinitrophenol	Pentachlorophenol
2-Chlorophenol	2-Methyl-4,6-dinitrophenol	Phenol
2,4-Dichlorophenol	2-Nitrophenol	2,4,6-Trichlorophenol
2,4-Dimethylphenol	4-Nitrophenol	

Surrogate Standard

M-604-SS-PFB		1 x 1 mL
M-604-SS-PFB-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		
2,4,6-Tribromophenol-PFB		

Method 604.1 Hexachlorophene & Dichlorophene by HPLC

M-604.1		1 x 1 mL
1.0 mg/mL each in AcCN		2 comps.
Hexachlorophene	Dichlorophene	

Method 605 Benzidines by HPLC

M-605-10X		1 x 1 mL
M-605-10X-PAK	SAVE	5 x 1 mL
1.0 mg/mL each in MeOH		2 comps.
Benzidine	3,3'-Dichlorobenzidine	

Method 606 Phthalate Esters by GC/ECD

M-606		1 x 1 mL
M-606-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		6 comps.
Benzyl butyl phthalate	Di-n-butyl phthalate	
Dimethyl phthalate	Di-n-octyl phthalate	
Diethyl phthalate	bis(2-Ethylhexyl)phthalate	

Method 607 Nitrosamines by GC/NPD

M-607		1 x 1 mL
M-607-PAK	SAVE	5 x 1 mL
At stated conc. in MeOH		3 comps.
N-Nitrosodimethylamine (0.2 mg/mL)	N-Nitrosodi-n-propylamine (0.2 mg/mL)	
N-Nitrosodiphenylamine (0.4 mg/mL)		

Method 608 Pesticides and PCBs by GC/ECD

M-001H		1 x 1 mL
At stated conc. in MeOH		16 comps.
Aldrin	(0.1 mg/mL)	Dieldrin (0.2 mg/mL)
α-BHC	(0.1 mg/mL)	Endosulfan I (0.2 mg/mL)
β-BHC	(0.1 mg/mL)	Endosulfan II (0.2 mg/mL)
δ-BHC	(0.1 mg/mL)	Endosulfan sulfate (0.6 mg/mL)
γ-BHC	(0.1 mg/mL)	Endrin (0.2 mg/mL)
4,4'-DDD	(0.6 mg/mL)	Endrin aldehyde (0.6 mg/mL)
4,4'-DDE	(0.2 mg/mL)	Heptachlor (0.1 mg/mL)
4,4'-DDT	(0.6 mg/mL)	Heptachlor epoxide (0.1 mg/mL)

M-001J		1 x 1 mL
At stated conc. in MeOH		2 comps.
Chlordane	(0.02 mg/mL)	Toxaphene (0.20 mg/mL)

M-001K		1 x 1 mL
0.2 mg/mL each in MeOH		4 comps.
Aroclor 1016		Aroclor 1248
Aroclor 1232		Aroclor 1260

M-001L		1 x 1 mL
0.2 mg/mL each in MeOH		3 comps.
Aroclor 1221		Aroclor 1254
Aroclor 1242		

Pesticides and PCBs Set

M-608-SET	4 x 1 mL
(M-001H, M-001J, M-001K, M-001L)	

Performance Check Solution

M-608-QC *		1 x 1 mL
M-608-QC-PAK *	SAVE	5 x 1 mL
At stated conc. in MeOH		17 comps.
Aldrin	(0.02 mg/mL)	Endosulfan I (0.02 mg/mL)
α-BHC	(0.02 mg/mL)	Endosulfan II (0.10 mg/mL)
β-BHC	(0.02 mg/mL)	Endosulfan sulfate (0.10 mg/mL)
δ-BHC	(0.02 mg/mL)	Endrin (0.10 mg/mL)
γ-BHC	(0.02 mg/mL)	Endrin aldehyde (0.02 mg/mL)
4,4'-DDD	(0.10 mg/mL)	Heptachlor (0.02 mg/mL)
4,4'-DDE	(0.02 mg/mL)	Heptachlor epoxide (0.02 mg/mL)
4,4'-DDT	(0.10 mg/mL)	Methoxychlor (0.02 mg/mL)
Dieldrin	(0.02 mg/mL)	

Pesticides

M-608-ASL		Alternate Source	1 x 1 mL
M-608-ASL-PAK		SAVE	5 x 1 mL
20 µg/mL each in MeOH			16 comps.
Aldrin	γ-BHC	Dieldrin	Endrin
α-BHC	p,p'-DDD	Endosulfan I	Endrin aldehyde
β-BHC	p,p'-DDE	Endosulfan II	Heptachlor
δ-BHC	p,p'-DDT	Endosulfan sulfate	Heptachlor epoxide (Isomer B)

Technical Mix Analytes - Aroclors (Polychlorinated Biphenyls)

Aroclors #	Cat. No.	1 mL	Cat. No.	PAK
Aroclor 1016	C-216S-H-10X		C-216S-H-10X-PAK	
Aroclor 1221	C-221S-H-10X		C-221S-H-10X-PAK	
Aroclor 1232	C-232S-H-10X		C-232S-H-10X-PAK	
Aroclor 1242	C-242S-H-10X		C-242S-H-10X-PAK	
Aroclor 1248	C-248S-H-10X		C-248S-H-10X-PAK	
Aroclor 1254	C-254S-H-10X		C-254S-H-10X-PAK	
Aroclor 1260	C-260S-H-10X		C-260S-H-10X-PAK	
Aroclor 1262	C-262S-H-10X		C-262S-H-10X-PAK	
Aroclor 1268	C-268S-H-10X		C-268S-H-10X-PAK	

* ColdPAK required to maintain integrity of product.



Method 608.1 & 608.2 Organochlorine Pesticides in Municipal & Industrial Wastewater by GC/ECD

M-608.1		1 x 1 mL
M-608.1-PAK	SAVE	5 x 1 mL
100 µg/mL each in Isooctane		7 comps.
Chlorobenzilate	Etridiazole	
Chloroneb	PCNB	
Chloropropylate	Propachlor	
Dibromochloropropane		

M-608.2		1 x 1 mL
M-608.2-PAK	SAVE	5 x 1 mL
100 µg/mL each in Isooctane		6 comps.
Chlorothalonil	Methoxychlor	
DCPA	cis-Permethrin *	
Dichloram	trans-Permethrin *	

* Actual concentrations stated on Certificate of Product Data

Method 609 Nitroaromatics & Isophorone by GC/ECD/FID

M-609A-R	1 x 1 mL
1.0 mg/mL each in Hexane	2 comps.
Isophorone	Nitrobenzene

M-609B-R	1 x 1 mL
1.0 mg/mL each in Hexane	2 comps.
2,4-Dinitrotoluene	2,6-Dinitrotoluene

M-609-R-SET	2 x 1 mL
	(M-609A-R, M-609B-R)

Performance Check Solution

M-609-QC	1 x 1 mL
At stated conc. in Acetone	4 comps.
Isophorone (100 µg/mL)	2,4-Dinitrotoluene (20 µg/mL)
Nitrobenzene (100 µg/mL)	2,6-Dinitrotoluene (20 µg/mL)

Method 610 PAHs by GC/FID or HPLC

M-610	1 x 1 mL
At stated conc. in MeOH:CH ₂ Cl ₂ (50:50)	16 comps.
M-610A	1 x 1 mL
At stated conc. in MeOH:CH ₂ Cl ₂ (50:50)	16 comps.
M-610-QC	1 x 1 mL
At stated conc in AcCN	16 comps.

Compound	M-610 (mg/mL)	M-610A (mg/mL)	M-610-QC (mg/mL)
Acenaphthene	0.1	1.0	0.1
Acenaphthylene	0.1	2.0	0.1
Anthracene	0.1	0.1	0.1
Benzo[a]anthracene	0.1	0.1	0.01
Benzo[a]pyrene	0.1	0.1	0.01
Benzo[b]fluoranthene	0.1	0.2	0.01
Benzo[g,h,i]perylene	0.1	0.2	0.01
Benzo[k]fluoranthene	0.1	0.1	0.005
Chrysene	0.1	0.1	0.01
Dibenz[a,h]anthracene	0.1	0.2	0.01
Fluoranthene	0.1	0.2	0.01
Fluorene	0.1	0.2	0.1
Indeno[1,2,3-cd]pyrene	0.1	0.1	0.01
Naphthalene	0.1	1.0	0.1
Phenanthrene	0.1	0.1	0.1
Pyrene	0.1	0.1	0.01

Method 611 Haloethers by GC/ECD or ECLD

M-611	1 x 1 mL
0.2 mg/mL each in MeOH	5 comps.
bis(2-Chloroethyl) ether	4-Bromophenyl phenyl ether
bis(2-Chloroethoxy)methane	4-Chlorophenyl phenyl ether
bis(2-Chloro-1-methylethyl) ether	

Method 612 Chlorinated Hydrocarbons by GC/ECD

M-612	1 x 1 mL
At stated conc. in Isooctane	9 comps.
2-Chloronaphthalene (400 µg/mL)	Hexachlorobutadiene (1 µg/mL)
1,2-Dichlorobenzene (200 µg/mL)	Hexachloroethane (1 µg/mL)
1,3-Dichlorobenzene (200 µg/mL)	Hexachlorocyclopentadiene (1 µg/mL)
1,4-Dichlorobenzene (400 µg/mL)	1,2,4-Trichlorobenzene (40 µg/mL)
Hexachlorobenzene (1 µg/mL)	

Method 613 2,3,7,8-TCDD by GC/MS

M-613	1 x 1 mL
M-613-PAK	5 x 1 mL
10 µg/mL in Toluene	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	

Method 614 & 614.1 Organophosphorus Pesticides by GC/NPD

M-614	1 x 1 mL
1,000 µg/mL each in Acetone:Hexane (50:50)	8 comps.
Azinphos methyl	Ethion
Demeton (mix of O & S isomers)	Malathion
Diazinon	Parathion
Disulfoton	Parathion methyl

M-614.1	1 x 1 mL
1,000 µg/mL each in Acetone:Hexane (50:50)	4 comps.
Dioxathion	Ethion
EPN	Terbufos

M-614.1-ASL	1 x 1 mL
At stated conc. in Hexane	4 comps.
Dioxathion (10 µg/mL)	Ethion (100 µg/mL)
EPN (200 µg/mL)	Terbufos (4 µg/mL)

Alternate Source

Matrix Spiking Solution

M-610-MS	1 x 1 mL
M-610-MS-PAK	5 x 1 mL
At stated conc. in AcCN	6 comps.
Benz[a]pyrene (0.5 mg/mL)	2-Methylnaphthalene (5.0 mg/mL)
Chrysene (0.5 mg/mL)	Phenanthrene (0.5 mg/mL)
1-Methylnaphthalene (5.0 mg/mL)	Pyrene (0.5 mg/mL)

For additional formulations also see Method 8310



EPA Method 600 Series

Method 615 Chlorinated Herbicides

Chlorinated Herbicides

Each at 0.2 mg/mL *	Herbicide Acids	Methyl Derivatives	1 mL
	In MeOH Cat. No.	In Hexane Cat. No.	
2,4-D	M-8150S-A-01	M-8150-01	
2,4-DB	M-8150S-A-02	M-8150-02	
2,4,5-T	M-8150S-A-03	M-8150-03	
2,4,5-TP	M-8150S-A-04	M-8150-04	
Dalapon	M-8150S-A-05	M-8150-05	
Dicamba	M-8150S-A-06	M-8150-06	
Dichlorprop	M-8150S-A-07	M-8150-07	
Dinoseb	M-8150S-A-08	M-8150-08	
MCPA (2.0 mg/mL) *	M-8150S-A-09	M-8150-09	
MCPP (2.0 mg/mL) *	M-8150S-A-10	M-8150-10	
Set of 10 x 1 mL	M-8150A-SET	M-8150-SET	
Each Solution at 0.2 mg/mL, * except MCPA & MCPP			Above analytes

Underivatized

M-8150A 1 x 1 mL
0.1 mg/mL in MeOH, except MCPA and MCPP 10 comps.

2,4-D	Dinoseb
Dalapon	MCPA (10 mg/mL)
2,4-DB	MCPP (10 mg/mL)
Dicamba	2,4,5-TP
Dichlorprop	2,4,5-T

Methyl Derivatives

M-8150 1 x 1 mL
0.1 mg/mL in MeOH, except MCPA and MCPP 10 comps.

2,4-D	Dinoseb
Dalapon	MCPA (10 mg/mL)
2,4-DB	MCPP (10 mg/mL)
Dicamba	2,4,5-TP
Dichlorprop	2,4,5-T

Method 615 Underivatized Chlorinated Herbicides

M-615A-ASL 1 x 1 mL
M-615A-ASL-PAK SAVE 5 x 1 mL
At stated conc. in MeOH 10 comps.

Method 615 Methyl Derivatives of Chlorinated Herbicides

M-615-ASL 1 x 1 mL
M-615-ASL-PAK SAVE 5 x 1 mL
At stated conc. in MeOH 10 comps.

2,4-D (100 µg/mL)	Dicamba (10 µg/mL)
2,4-DB (100 µg/mL)	Dichlorprop (100 µg/mL)
2,4,5-T (10 µg/mL)	Dinoseb (50 µg/mL)
2,4,5-TP (10 µg/mL)	MCPA (10,000 µg/mL)
Dalapon (250 µg/mL)	MCPP (10,000 µg/mL)

Method 617 Chlorinated Pesticides & PCBs by GC/ECD

Mix #1 - Analytes

Z-014C-R2 1 x 1 mL
Z-014C-R2-PAK SAVE 5 x 1 mL
2.0 mg/mL each in Hexane:Toluene (50:50) 18 comps.

Aldrin	4,4'-DDE	Endrin
α-BHC	4,4'-DDT	Endrin ketone
β-BHC	Dieldrin	Endrin aldehyde
γ-BHC	Endosulfan I	Heptachlor
δ-BHC	Endosulfan II	Heptachlor epoxide
4,4'-DDD	Endosulfan sulphate	Methoxychlor

Mix #2 - Analytes

M-617-2 1 x 1 mL
2.0 mg/mL each in Hexane:Toluene (50:50) 9 comps.

Captan	Dicofol	PCNB
Carbophenothion	Isodrin	Perthane
Dichloran	Mirex	Trifluralin

Method 617 Chlorinated Pesticides & PCBs (Cont.)

Chlordane

P-017S-20X 1 x 1 mL
2.0 mg/mL in MeOH

Toxaphene

P-093S-40X 1 x 1 mL
4.0 mg/mL in MeOH

Method 618 Volatile Pesticides by GC/ECD

Volatile Pesticides

M-618 1 x 1 mL
20 mg/mL each in Isooctane 2 comps.
Chloropicrin Ethylene dibromide

Internal Standard

M-618-IS 1 x 1 mL
20 mg/mL in Isooctane
Bromoform

Method 619 Triazine Herbicides by GC/NPD

Triazine Herbicides

Compound	Cat. No.	1 mL	Compound	Cat. No.	1 mL
Ametryn	M-619-01		Secbumeton	M-619-07	
Atraton	M-619-02		Simetryn	M-619-08	
Atrazine	M-619-03		Simazine	M-619-09	
Prometon	M-619-04		Terbutylazine	M-619-10	
Prometryn	M-619-05		Terbutryn	M-619-11	
Propazine	M-619-06				

M-619-SET 11 x 1 mL
Each at 0.1 mg/mL in MeOH Above 11 compounds
M-619M 1 x 1 mL
0.1 mg/mL each in MeOH Above 11 compounds

Method 620 Diphenylamine by GC/NPD

Diphenylamine

M-620 * 1 x 1 mL
1000 µg/mL each in MeOH
Diphenylamine

Method 622 Organophosphorus Pesticides by GC/NPD

Organophosphorus Pesticides

M-622-SET 27 x 1 mL
1000 µg/mL each in Hexane

Azinphos methyl (01)	Merphos (15)
Bolstar (Sulprofos) (02)	Mevinphos (16)
Chlorpyrifos (03)	Monocrotophos (17)
Coumaphos (04)	Naled (18)
Demeton, O & S (05)	Parathion ethyl (19)
Diazinon (06)	Parathion methyl (20)
Dichlorvos (07)	Phorate (21)
Dimethoate (08)	Ronnel (22)
Disulfoton (09)	Stirophos (23)
EPN (10)	Sulfotep (24)
Ethoprop (11)	TEPP (25)
Fensulfthion (12)	Tokuthion (26)
Fenthion (13)	Trichloronate (27)
Malathion (14)	

* ColdPAK required to maintain integrity of product.



Method 622.1 Thiophosphate Pesticides by GC/NPD

Thiophosphate Pesticides

M-622.1

1.0 mg/mL each in MtBE

1 x 1 mL

7 comps.

Aspon
Dichlofenthion
Famphur
Fenitrothion

Fonophos
Phosmet
Thionazin

Method 624 Purgeables by GC/MS

Purgeables

M-624

0.2 mg/mL each in MeOH

1 x 1 mL

31 comps.

Benzene	<i>trans</i> -1,2-Dichloroethene
Bromodichloromethane	1,2-Dichloropropane
Bromoform	<i>cis</i> -1,3-Dichloropropene *
Bromomethane	<i>trans</i> -1,3-Dichloropropene **
Carbon tetrachloride	Ethylbenzene
Chlorobenzene	Methylene chloride
Chloroethane	1,1,2,2-Tetrachloroethane
2-Chloroethylvinyl ether	Tetrachloroethene
Chloroform	Toluene
Chloromethane	1,1,1-Trichloroethane
Dibromochloromethane	1,1,2-Trichloroethane
1,2-Dichlorobenzene	Trichloroethene
1,3-Dichlorobenzene	Trichlorofluoromethane
1,4-Dichlorobenzene	Vinyl chloride
1,1-Dichloroethane	
1,2-Dichloroethane	
1,1-Dichloroethene	

* *cis* (1.06 x conc.)

** *trans* (0.94 x conc.)

Technical Note

Tetrachloroethane and 1,1-Dichloroethane can degrade on contaminated purge & trap transfer lines or old traps.

Surrogates

Each at 0.2 mg/mL in MeOH

Component	Cat. No.	1 mL
Benzene-d ₆	M-624-SS-01	
Bromochloromethane	M-624-SS-02	
4-Bromofluorobenzene	M-624-SS-03	
1-Chloro-2-bromopropane	M-624-SS-04	
1,4-Dichlorobutane	M-624-SS-05	
1,2-Dichloroethane-d ₄	M-624-SS-06	
1,4-Difluorobenzene	M-624-SS-07	
Ethylbenzene-d ₁₀	M-624-SS-08	
Fluorobenzene	M-624-SS-09	
Pentafluorobenzene	M-624-SS-10	
1,2-Dichlorobenzene-d ₄	M-624-SS-11	
2-Bromochlorobenzene	M-624-SS-12	
4-Chlorofluorobenzene	M-624-SS-13	
a,a,a-Trichlorotoluene	M-624-SS-14	

Surrogate Standards

M-624-SS-M

M-624-SS-M-PAK

20 mg/mL each in MeOH

1 x 1 mL

5 x 1 mL

3 comps.

4-Bromofluorobenzene
Fluorobenzene

Pentafluorobenzene

Internal Standard

M-001R

M-001R-PAK

20 mg/mL each in MeOH

1 x 1 mL

5 x 1 mL

3 comps.

Bromochloromethane
1,4-Dichlorobutane

2-Bromo-1-chloropropane

Tens of thousands of Standards Ready-to-Ship



Method 622-624



EPA Method 600 Series

Method 625 Semi-Volatiles Analysis by GC/MS

The following composite mixtures were formulated to allow the flexibility of preparing a complete semi-volatile mix to meet your laboratory's specific needs. These Base/Neutral analytes are also available in a two-ampule set to extend the useful life of your stock calibration standards.

M-625-BN		1 x 1 mL
M-625-BN-PAK	SAVE	5 x 1 mL
0.1 mg/mL each in CH_2Cl_2 44 Base-Neutrals and 2 Benzidines		
M-625-BN-5X		1 x 1 mL
M-625-BN-5X-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in CH_2Cl_2 44 Base-Neutrals and 2 Benzidines		
CLP-HC-BN		1 x 1 mL
CLP-HC-BN-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in Benzene : CH_2Cl_2 : AcCN (40:40:20) 44 Base-Neutrals and 2 Benzidines		
CLP-HC-BN-SET		2 x 1 mL
CLP-HC-BN-SET-PAK	SAVE	5 x (2 x 1 mL)
CLP-HC-BN-R & Z-014F		

Base-Neutral Analytes (44 comps.)

Acenaphthene	Diethyl phthalate
Acenaphthylene	Dimethyl phthalate
Anthracene	2,4-Dinitrotoluene
Azobenzene	2,6-Dinitrotoluene
Benz[a]anthracene	Di- <i>n</i> -octyl phthalate
Benzo[b]fluoranthene	bis(2-Ethylhexyl)phthalate
Benzo[k]fluoranthene	Fluoranthene
Benzo[g,h,i]perylene	Fluorene
Benzo[a]pyrene	Hexachlorobenzene
4-Bromophenyl phenyl ether	Hexachlorobutadiene
Butyl benzyl phthalate	Hexachlorocyclopentadiene
bis(2-Chloroethoxy)methane	Hexachloroethane
bis(2-Chloroethyl) ether	Indeno[1,2,3- <i>cd</i>]pyrene
bis(2-Chloro-1-methylethyl) ether	Isophorone
2-Chloronaphthalene	Naphthalene
4-Chlorophenyl phenyl ether	Nitrobenzene
Chrysene	N-Nitrosodimethylamine
Dibenz[a,h]anthracene	N-Nitrosodiphenylamine
Di- <i>n</i> -butyl phthalate	N-Nitrosodi- <i>n</i> -propylamine
1,2-Dichlorobenzene	Phenanthrene
1,3-Dichlorobenzene	Pyrene
1,4-Dichlorobenzene	1,2,4-Trichlorobenzene

Benzidine Analytes (2 comps.)

Benzidine	3,3'-Dichlorobenzidine
-----------	------------------------

Base-Neutral Mix

CLP-HC-BN-R	1 x 1 mL
2.0 mg/mL each in Benzene : CH_2Cl_2 : AcCN (40:40:20) 44 comps.	
CLP-HC-BN-R-PAK	SAVE 5 x 1 mL
2.0 mg/mL each in Benzene : CH_2Cl_2 : AcCN (40:40:20) 44 comps.	

Benzidine Analytes (2 comps.)

Z-014F	1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.	

Method 625 Modification Standard

M-625-MOD	1 x 1 mL
M-625-MOD-PAK	SAVE 5 x 1 mL
2000 µg/mL each in CH_2Cl_2 17 comps.	

Acetophenone	<i>n</i> -Dodecane
Aniline	<i>n</i> -Eicosane
Benzoic acid	<i>n</i> -Hexadecane
Carbazole	1-Methylphenanthrene
<i>p</i> -Cresol	<i>n</i> -Octadecane
<i>o</i> -Cresol	Pyridine
2,3-Dichloroaniline	<i>a</i> -Terpineol
<i>n</i> -Decane	<i>n</i> -Tetradecane
<i>n</i> -Docosane	

Daily QA/QC Standards

M-625-BN-1		1 x 1 mL
M-625-BN-1-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in CH_2Cl_2 12 comps.		
Acenaphthylene	3,3'-Dichlorobenzidine	
Benzo[b]fluoranthene	Dimethyl phthalate	
4-Bromophenylphenyl ether	Di- <i>n</i> -butyl phthalate	
bis(2-Chloroethyl) ether	2,6-Dinitrotoluene	
bis(2-Chloro-1-methylethyl) ether	bis(2-Ethylhexyl)phthalate	
1,4-Dichlorobenzene	Nitrobenzene	

M-625-BN-2		1 x 1 mL
M-625-BN-2-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in CH_2Cl_2 15 comps.		

Acenaphthene	Diethyl phthalate
Anthracene	2,4-Dinitrotoluene
Benz[a]anthracene	Fluorene
bis(2-Chloroethoxy)methane	Hexachlorobenzene
Chrysene	Hexachlorobutadiene
Dibenz[a,h]anthracene	Naphthalene
1,2-Dichlorobenzene	Pyrene
1,3-Dichlorobenzene	

M-625-BN-3		1 x 1 mL
M-625-BN-3-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in CH_2Cl_2 11 comps.		

Azobenzene	Isophorone
Benzyl butyl phthalate	N-Nitrosodi- <i>n</i> -propylamine
2-Chloronaphthalene	N-Nitrosodiphenylamine
Phenanthrene	Phenanthrene
Hexachlorocyclopentadiene	1,2,4-Trichlorobenzene
Hexachloroethane	

Technical Note

n-Nitrosodiphenylamine will decompose to form diphenylamine in a heated injection port.

M-625-BN-4		1 x 1 mL
M-625-BN-4-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in CH_2Cl_2 8 comps.		

Benzidine	4-Chlorophenylphenyl ether
Benzo[a]pyrene	Di- <i>n</i> -octyl phthalate
Benzo[g,h,i]perylene	Indeno[1,2,3- <i>cd</i>]pyrene
Benzo[k]fluoranthene	N-Nitrosodimethylamine

Technical Note

The above 4 standards can be combined for use in daily QA/QC, as a second source lot or as spike and spike duplicate.

High Concentration Acid Extractables Phenol Mix

Z-014H		1 x 1 mL
Z-014H-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in CH_2Cl_2 11 comps.		

4-Chloro-3-methylphenol	2-Nitrophenol
2-Chlorophenol	4-Nitrophenol
2,4-Dichlorophenol	Pentachlorophenol
2,4-Dimethylphenol	Phenol
2,4-Dinitrophenol	2,4,6-Trichlorophenol
2-Methyl-4,6-dinitrophenol	



Method 625 Semi-Volatiles Analysis by GC/MS (Continued)

Acid Extractables Mixture

M-625A		1 x 1 mL
M-625A-PAK	SAVE	5 x 1 mL
20 µg/mL each in MeOH		
4-Chloro-3-methylphenol	2-Nitrophenol	
2-Chlorophenol	4-Nitrophenol	
2,4-Dichlorophenol	Pentachlorophenol	
2,4-Dimethylphenol	Phenol	
2,4-Dinitrophenol	2,4,6-Trichlorophenol	
4,6-Dinitro-2-methylphenol		

Single Component Surrogates & Internal Standards

Base/Neutrals

Individual solutions at 0.2 mg/mL in CH₂Cl₂

Component	Cat. No.	1 mL
Aniline-d ₅	M-625-01	
Anthracene-d ₁₀	M-625-02	
Benz[a]anthracene-d ₁₂	M-625-03	
Decafluorobiphenyl	M-625-04	
4,4'-Dibromobiphenyl	M-625-05	
4,4'-Dibromooctafluorobiphenyl	M-625-06	
2,2'-Difluorobiphenyl	M-625-07	
4-Fluoroaniline	M-625-08	
2-Fluorobiphenyl	M-625-09	
1-Fluoronaphthalene	M-625-10	
2-Fluoronaphthalene	M-625-11	
Naphthalene-d ₈	M-625-12	
Nitrobenzene-d ₅	M-625-13	
Phenanthrene-d ₁₀	M-625-14	
Pyridine-d ₅	M-625-15	

Acids

Individual solution at 0.2 mg/mL in CH₂Cl₂

Component	Cat. No.	1 mL
2-Fluorophenol	M-625-16	
Pentafluorophenol	M-625-17	
Phenol-d ₅	M-625-18	
2,4,6-Tribromophenol	M-625-19	
2-Chlorophenol-d ₄	M-625-20	

Pesticide Extractables Mixture

M-625P		1 x 1 mL
M-625P-PAK	SAVE	5 x 1 mL
20 µg/mL each in MeOH		
Aldrin	Dieldrin	
β-BHC	Endosulfan sulfate	
δ-BHC	Endrin aldehyde	
4,4'-DDD	Heptachlor	
4,4'-DDE	Heptachlor epoxide	
4,4'-DDT		

GC/MS Calibration Standards

M-625C-SET set of 5 x 1 mL
5 solutions each at stated conc. in CH₂Cl₂

Component	Cat. No.	1 mL
Benzidine (50 µg/mL)	M-625C-1	
Pentachlorophenol (25 µg/mL)	M-625C-2	
Decafluorotriphenylphosphine (DFTPP) (25 µg/mL)	M-625C-3	
Benzidine (50 µg/mL) + DFTPP (25 µg/mL)	M-625C-4	
Pentachlorophenol(25 µg/mL) + DFTPP(25 µg/mL)	M-625C-5	

GC/MS Tuning Standards

M-625-TS		1 x 1 mL
M-625-TS-PAK	SAVE	5 x 1 mL
50 µg/mL each in CH ₂ Cl ₂		
M-625-TS-20X		1 x 1 mL
M-625-TS-20X-PAK	SAVE	5 x 1 mL
1000 µg/mL each in CH ₂ Cl ₂		
Benzidine	DFTPP	
p,p'-DDT	Pentachlorophenol	
CLP-TS		1 x 1 mL
CLP-TS-PAK	SAVE	5 x 1 mL
50 µg/mL in CH ₂ Cl ₂		
Perfluorokerosene		

Multi-Component Analytes (Polychlorinated Biphenyls, Chlordane & Toxaphene)

Each at 1,000 µg/mL in Hexane **AccuPAK™ (5 x 1 mL)**
SAVE

Aroclors #	Cat. No.	1 mL	Cat. No.	PAK
Aroclor 1016	C-216S-H-10X		C-216S-H-10X-PAK	
Aroclor 1221	C-221S-H-10X		C-221S-H-10X-PAK	
Aroclor 1232	C-232S-H-10X		C-232S-H-10X-PAK	
Aroclor 1242	C-242S-H-10X		C-242S-H-10X-PAK	
Aroclor 1248	C-248S-H-10X		C-248S-H-10X-PAK	
Aroclor 1254	C-254S-H-10X		C-254S-H-10X-PAK	
Aroclor 1260	C-260S-H-10X		C-260S-H-10X-PAK	
Aroclor 1262	C-262S-H-10X		C-262S-H-10X-PAK	
Aroclor 1268	C-268S-H-10X		C-268S-H-10X-PAK	
Pesticides				
Chlordane	P-017S-H-10X		P-017S-H-10X-PAK	
Toxaphene	P-093S-H-10X		P-093S-H-10X-PAK	

Chlordane and Toxaphene

M-001J		1 x 1 mL
M-001J-PAK	SAVE	5 x 1 mL
At stated conc. in MeOH		
Chlordane (0.02 mg/mL)	Toxaphene (0.20 mg/mL)	2 comps.

Polychlorinated Biphenyls

Aroclor Mix #1

M-001K		1 x 1 mL
0.2 mg/mL each in MeOH		
Aroclor 1016	Aroclor 1248	
Aroclor 1232	Aroclor 1260	

Aroclor Mix #2

M-001L		1 x 1 mL
0.2 mg/mL each in MeOH		
Aroclor 1221	Aroclor 1254	
Aroclor 1242		3 comps.

Internal Standard Mix

Z-014J		1 x 1 mL
Z-014J-PAK	SAVE	5 x 1 mL
4.0 mg/mL each in CH ₂ Cl ₂		
Acenaphthene-d ₁₀	Naphthalene-d ₈	
Chrysene-d ₁₂	Perylene-d ₁₂	
1,4-Dichlorobenzene-d ₂	Phenanthrene-d ₁₀	



EPA Method 600 Series

Method 625 Priority Pollutant Standards

The EPA procedures call for fused silica capillary column analysis of priority pollutants. AccuStandard has assembled the following mixtures to be used in calibrating this analytical system. These mixtures are highly concentrated to aid in the establishment of response factors.

Base/Neutrals - Mix #1

Z-014A		1 x 1 mL
Z-014A-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂		
4-Bromophenylphenyl ether	Dimethyl phthalate	
Butyl benzyl phthalate	Di- <i>n</i> -butyl phthalate	
bis(2-Chloroethoxy)methane	Di- <i>n</i> -octyl phthalate	
bis(2-Chloroethyl) ether	bis(2-Ethylhexyl)phthalate	
bis(2-Chloro-1-methylethyl) ether	N-Nitrosodimethylamine	
4-Chlorophenylphenyl ether	N-Nitrosodi- <i>n</i> -propylamine	
Diethyl phthalate	N-Nitrosodiphenylamine	

Base/Neutrals - Mix #2

Z-014B		1 x 1 mL
Z-014B-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂		
Azobenzene	Hexachlorobenzene	
2-Chloronaphthalene	Hexachlorobutadiene	
1,2-Dichlorobenzene	Hexachlorocyclopentadiene	
1,3-Dichlorobenzene	Hexachloroethane	
1,4-Dichlorobenzene	Isophorone	
2,4-Dinitrotoluene	Nitrobenzene	
2,6-Dinitrotoluene	1,2,4-Trichlorobenzene	

Toxic Substances - Mix #1

Z-014D		1 x 1 mL
Z-014D-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂		
Benzoic acid	4-Methylphenol	
2-Methylphenol	2,4,5-Trichlorophenol	

Toxic Substances - Mix #2

Z-014E		1 x 1 mL
Z-014E-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂		
Aniline	2-Methylnaphthalene	
Benzyl alcohol	2-Nitroaniline	
4-Chloroaniline	3-Nitroaniline	
Dibenzofuran	4-Nitroaniline	

Benzidine Mix

Z-014F		1 x 1 mL
Z-014F-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		
Benzidine	3,3'-Dichlorobenzidine	

PAH Mix

Z-014G		1 x 1 mL
Z-014G-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂ :Benzene (50:50)		
Acenaphthene	Chrysene	
Acenaphthylene	Dibenz[a,h]anthracene	
Anthracene	Fluoranthene	
Benz[a]anthracene	Fluorene	
Benzo[a]pyrene	Indeno[1,2,3-cd]pyrene	
Benzo[b]fluoranthene	Naphthalene	
Benzo[g,h,i]perylene	Phenanthrene	
Benzo[k]fluoranthene	Pyrene	

PAH Mix

Z-014G-R		1 x 1 mL
Z-014G-R-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂ :Benzene (50:50)		
Acenaphthene	Chrysene	
Acenaphthylene	Dibenz[a,h]anthracene	
Anthracene	Fluoranthene	
Benz[a]anthracene	Fluorene	
Benzo[a]pyrene	Indeno[1,2,3-cd]pyrene	
Benzo[b]fluoranthene	Naphthalene	
Benzo[g,h,i]perylene	Phenanthrene	
Benzo[k]fluoranthene	Pyrene	
Carbazole		

Phenols Mix

Z-014H		1 x 1 mL
Z-014H-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂		
4-Chloro-3-methylphenol	2-Nitrophenol	
2-Chlorophenol	4-Nitrophenol	
2,4-Dichlorophenol	Pentachlorophenol	
2,4-Dimethylphenol	Phenol	
2,4-Dinitrophenol	2,4,6-Trichlorophenol	
2-Methyl-4,6-dinitrophenol		

Internal Standard Mix

Z-014J		1 x 1 mL
Z-014J-PAK	SAVE	5 x 1 mL
4.0 mg/mL each in CH ₂ Cl ₂		
Acenaphthene-d ₁₀	Naphthalene-d ₈	
Chrysene-d ₁₂	Perylene-d ₁₂	
1,4-Dichlorobenzene-d ₄	Phenanthrene-d ₁₀	

Method 625 Priority Pollutant Set

Order a complete Set **SAVE 25%**

Z-014R-SET	set of 9 x 1 mL	Z-014R-1-SET	set of 9 x 1 mL	Z-014R-2-SET	set of 7 x 1 mL	Z-014R-3-SET	set of 7 x 1 mL
Set includes:		Set includes:		Set includes:		Set includes:	
Z-014A	Base/Neutrals - Mix #1	Z-014A	Base/Neutrals - Mix #1	Z-014A	Base/Neutrals - Mix #1	Z-014A	Base/Neutrals - Mix #1
Z-014B	Base/Neutrals - Mix #2	Z-014B	Base/Neutrals - Mix #2	Z-014B	Base/Neutrals - Mix #2	Z-014B	Base/Neutrals - Mix #2
Z-014C	Pesticides - Mix #1	Z-014C-R	Pesticides - Mix #2	Z-014D	Toxic Substances - Mix #1	Z-014D	Toxic Substances - Mix #1
Z-014D	Toxic Substances - Mix #1	Z-014D	Toxic Substances - Mix #1	Z-014E	Toxic Substances - Mix #2	Z-014E	Toxic Substances - Mix #2
Z-014E	Toxic Substances - Mix #2	Z-014E	Toxic Substances - Mix #2	Z-014F	Benzidine Mix	Z-014F	Benzidine Mix
Z-014F	Benzidine Mix	Z-014F	Benzidine Mix	Z-014G	PAH Mix	Z-014G-R	PAH Mix
Z-014G-R	PAH Mix	Z-014G-R	PAH Mix	Z-014H	Phenols Mix	Z-014H	Phenols Mix
Z-014H	Phenols Mix	Z-014H	Phenols Mix				
Z-014J	Internal Standard Mix	Z-014J	Internal Standard Mix				



Method 625 (continued) Priority Pollutant Standards

Pesticides - Mix #1

Z-014C 1 x 1 mL
Z-014C-PAK 5 x 1 mL
 2.0 mg/mL each in Toluene:Hexane (50:50) 16 comps.

SAVE

Aldrin	4,4'-DDE	Endosulfan sulfate
α-BHC	4,4'-DDT	Endrin
β-BHC	Dieldrin	Endrin aldehyde
γ-BHC	Endosulfan I	Heptachlor
δ-BHC	Endosulfan II	Heptachlor epoxide
4,4'-DDD		

Pesticides - Mix #2

Z-014C-R 1 x 1 mL
Z-014C-R-PAK 5 x 1 mL
 2.0 mg/mL each in Toluene:Hexane (50:50) 20 comps.

SAVE

Aldrin	4,4'-DDD	Endrin
α-BHC	4,4'-DDE	Endrin aldehyde
β-BHC	4,4'-DDT	Endrin ketone
γ-BHC	Dieldrin	Heptachlor
δ-BHC	Endosulfan I	Heptachlor epoxide
α-Chlordane	Endosulfan II	Methoxychlor
γ-Chlordane	Endosulfan sulfate	

Pesticides - Mix #3

Z-014C-R2 1 x 1 mL
Z-014C-R2-PAK 5 x 1 mL
 2.0 mg/mL each in Toluene:Hexane (50:50) 18 comps.

SAVE

Aldrin	4,4'-DDE	Endrin
α-BHC	4,4'-DDT	Endrin aldehyde
β-BHC	Dieldrin	Endrin ketone
γ-BHC	Endosulfan I	Heptachlor
δ-BHC	Endosulfan II	Heptachlor epoxide
4,4'-DDD	Endosulfan sulfate	Methoxychlor

Tuning Standards

M-625-TS 1 x 1 mL
M-625-TS-PAK 5 x 1 mL
 50 µg/mL each in CH₂Cl₂ 4 comps.

SAVE

Benzidine	DFTPP
p,p'-DDT	Pentachlorophenol

CLP-TS 1 x 1 mL
CLP-TS-PAK 5 x 1 mL
 50 µg/mL in CH₂Cl₂

SAVE

Perfluorokerosene

EPA Method 625 GC/MS Calibration Standards

M-625C-SET set of 5 x 1 mL
 5 solutions each at stated conc. in CH₂Cl₂

Compound	Cat. No.
Benzidine (50 µg/mL)	M-625C-1
Pentachlorophenol (25 µg/mL)	M-625C-2
Decafluorotriphenylphosphine (DFTPP) (25 µg/mL)	M-625C-3
Benzidine (50 µg/mL) + DFTPP (25 µg/mL)	M-625C-4
Pentachlorophenol (25 µg/mL) + DFTPP(25 µg/mL)	M-625C-5

Method 627 Dinitroaniline Pesticides by GC/ECD

Dinitroaniline Pesticide Mixes

M-627 1 x 1 mL
 1.0 mg/mL each in MeOH 4 comps.

Ethalfuralin	Tolban (Profluralin)
Paarlan (Isopropalin)	Trifluralin

M-627-R 1 x 1 mL
 1.0 mg/mL each in MeOH 5 comps.

Benfluralin	Tolban (Profluralin)
Ethalfuralin	Trifluralin
Paarlan (Isopropalin)	

Method 632 Carbamates & Urea Pesticides in Waste Water by HPLC

Carbamates & Urea Pesticides in Waste Water

M-632-SET set of 21 x 1 mL
 Individual Solutions, in 0.1 mg/mL in AcCN

M-632M 1 x 1 mL
 Mixture containing the 21 analytes @ 0.1 mg/mL each in AcCN

M-632M-10X 1 x 1 mL
 Mixture containing the 21 analytes @ 1.0 mg/mL each in AcCN

	Cat. No.		Cat. No.
Aminocarb	M-632-01	Methomyl	M-632-12
Barban	M-632-02	Mexacarbate	M-632-13
Carbaryl	M-632-03	Monuron	M-632-14
Carbofuran	M-632-04	Monuron-TCA	M-632-15
Chlorpropham	M-632-05	Neburon	M-632-16
Diuron	M-632-06	Oxamyl	M-632-17
Fenuron	M-632-07	Propham	M-632-18
Fenuron-TCA	M-632-08	Propoxur	M-632-19
Fluometuron	M-632-09	Siduron	M-632-20
Linuron	M-632-10	Swep	M-632-21
Methiocarb	M-632-11		

Method 632.1 Carbamates & Amides in Waste Water by HPLC

Carbamates & Amides in Waste Water

M-632.1-SET set of 4 x 1 mL
 Each in 0.1 mg/mL in AcCN

Vacor	M-632.1-1	Napropamide	M-632.1-3
Propanil	M-632.1-2	Carbaryl	M-632.1-4

Method 633 Organonitrogen Pesticides by GC/NPD

Organonitrogen Pesticides Mix

M-633 1 x 1 mL
 0.1 mg/mL each in MeOH 6 comps.

Bromacil	Hexazinone	Terbacil
Deet	Metribuzin	Triadimefon

Method 634 Thiocarbamate Pesticides by GC/NPD

Thiocarbamate Pesticides Mix

M-634 1 x 1 mL
 1.0 mg/mL each in MeOH 6 comps.

Butylate	EPTC	Pebulate
Cycloate	Molinate	Vernolate

Internal Standard

M-634-IS 1 x 1 mL
 1.0 mg/mL in MeOH

Carbazole



EPA Method 600 Series

Method 645 Amino Pesticides & Lethane by GC/NPD

Amino Pesticides Mix

M-645

1.0 mg/mL each in Hexane

1 x 1 mL

6 comps.

Alachlor	Diphenamid	Lethane
Butachlor	Fluridone	Norflurazon

HPLC 600's Additional Methods for Pesticides in Waste Water by HPLC

Method	Solutions at 0.1 mg/mL in AcCN	Cat. No.
604.1	Hexachlorophene & Dichlorophene	M-604.1
629	Cyanazine	M-629
631	Carbendazim	M-631
635	Rotenone	M-635
636	Bensulide	M-636
638	Oryzalin	M-638

Method	Solutions at 0.1 mg/mL in AcCN	Cat. No.
639	Bendiocarb	M-639
640	Mercaptobenzothiazole	M-640
641	Thiabendazole	M-641
642	Biphenyl & o-Phenylphenol	M-642
643	Bentazon (<i>Basagran</i>)	M-643
644	Picloram	M-644

Method 680 Determination of Pesticides & PCBs in Water & Soil/Sediment by GC/MS

PCB Isomer Calibration Mix

M-680A

At stated conc. in Hexane

1 x 1 mL

9 comps.

2-Chlorobiphenyl	(50 µg/mL)
2,3-Dichlorobiphenyl	(50 µg/mL)
2,4,5-Trichlorobiphenyl	(50 µg/mL)
2,2',4,6-Tetrachlorobiphenyl	(100 µg/mL)
2,2',3,4,5'-Pentachlorobiphenyl	(100 µg/mL)
2,2',4,4',5,6'-Hexachlorobiphenyl	(100 µg/mL)
2,2',3,4',5,6,6'-Heptachlorobiphenyl	(150 µg/mL)
2,2',3,3',4,5',6,6'-Octachlorobiphenyl	(150 µg/mL)
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	(250 µg/mL)

Internal Standard

M-680B

1 x 1 mL

250 µg/mL in Toluene

Chrysene-d₁₂

Method 680 PCB Isomer Calibration Set

M-680-SET

2 x 1 mL

(M-680A, M-680B)

Technical Note

The EPA has designated 3,3',4,4'-tetrachlorobiphenyl (#77), 2,2',4,6,6'-pentachlorobiphenyl (#104), & 2,2',3,3',4,5,5',6,6'-nonachlorobiphenyl (# 208) for use in quantifying PCBs by GC/MS. All response factors are calculated using Chrysene-d₁₂, which is also included in the set.

The EPA has designated the following isomers for use in quantifying PCB's by GC/MS. The PCBs are identified and measured as isomer groups (i.e., by level of chlorination). A concentration is measured for each PCB isomer group; total PCB concentration in each sample extract is obtained by summing isomer group.

Level of Chlorination	Isomer Selected	Congener Number	RF Value vs. Chrysene-d ₁₂	Mean RF Value vs.* Chrysene-d ₁₂
1	2-mono	1	0.899	0.925
2	2,3-di	5	0.651	0.642
3	2,4,5-tri	29	0.411	0.411
4	2,2',4,6-tetra	50	0.305	0.431
5	2,2',3,4,5'-penta	87	0.299	0.287
6	2,2',4,4',5,6'-hexa	154	0.254	0.254
7	2,2',3,4',5,6,6'-hepta	188	0.164	0.160
8	2,2',3,3',4,5',6,6'-octa	201	0.207	0.191
9,10	2,2',3,3',4,4',5,5',6,6'-deca	209	0.144	0.150

Pesticide Mix

M-680P

M-680P-PAK

SAVE

At stated conc. in Toluene:Hexane (50:50)

1 x 1 mL

5 x 1 mL

22 comps.

Aldrin	(1,000 µg/mL)	Endosulfan I	(2,000 µg/mL)
α-BHC	(1,000 µg/mL)	Endosulfan II	(2,000 µg/mL)
β-BHC	(1,000 µg/mL)	Endosulfan sulfate	(1,000 µg/mL)
γ-BHC	(1,000 µg/mL)	Endrin	(1,000 µg/mL)
δ-BHC	(1,000 µg/mL)	Endrin aldehyde	(1,000 µg/mL)
α-Chlordane	(1,000 µg/mL)	Endrin ketone	(1,000 µg/mL)
γ-Chlordane	(1,000 µg/mL)	Heptachlor	(1,000 µg/mL)
4,4'-DDD	(1,000 µg/mL)	Heptachlor epoxide (Isomer B)	(1,000 µg/mL)
4,4'-DDE	(1,000 µg/mL)	Methoxychlor	(1,000 µg/mL)
4,4'-DDT	(1,000 µg/mL)	cis-Nonachlor	(1,000 µg/mL)
Dieldrin	(1,000 µg/mL)	trans-Nonachlor	(1,000 µg/mL)

Internal Standard

M-680-IS

M-680-IS-PAK

SAVE

75 µg/mL each in Toluene:Hexane (50:50)

M-680-IS-10X

M-680-IS-10X-PAK

SAVE

750 µg/mL each in Hexane:CH₂Cl₂ (50:50)

Chrysene-d₁₂ Phenanthrene-d₁₀

Tuning Standard

M-680-TS

M-680-TS-PAK

SAVE

10 µg/mL in CH₂Cl₂

Decafluorotriphenylphosphine (DFTPP)

Pesticide Mid-Level Check

M-680P-MLC

M-680P-MLC-PAK

SAVE

At stated conc. Toluene:Hexane (50:50)

1 x 1 mL

5 x 1 mL

21 comps.

Aldrin	(1,000 µg/mL)	Endosulfan I	(2,000 µg/mL)
α-BHC	(1,000 µg/mL)	Endosulfan II	(2,000 µg/mL)
β-BHC	(1,000 µg/mL)	Endosulfan sulfate	(1,000 µg/mL)
γ-BHC	(1,000 µg/mL)	Endrin	(1,000 µg/mL)
δ-BHC	(1,000 µg/mL)	Endrin ketone	(1,000 µg/mL)
α-Chlordane	(1,000 µg/mL)	Heptachlor	(1,000 µg/mL)
γ-Chlordane	(1,000 µg/mL)	Heptachlor epoxide (Isomer B)	(1,000 µg/mL)
4,4'-DDD	(1,000 µg/mL)	Methoxychlor	(1,000 µg/mL)
4,4'-DDE	(1,000 µg/mL)	cis-Nonachlor	(1,000 µg/mL)
4,4'-DDT	(1,000 µg/mL)	trans-Nonachlor	(1,000 µg/mL)
Dieldrin	(1,000 µg/mL)		

Retention Time Calibration Standard

M-680-RT

M-680-RT-PAK

SAVE

At stated conc. in Hexane

1 x 1 mL

5 x 1 mL

3 comps.

3,3',4,4'-Tetrachlorobiphenyl (100 µg/mL)
2,2',4,6,6'-Pentachlorobiphenyl (100 µg/mL)
2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl (200 µg/mL)

Method 1311 Toxicity Characteristic Leaching Procedure (TCLP)

Volatile Spiking Mixture

TCLP-VOC	1 x 1 mL
5.0 mg/mL each in MeOH, except 2-Butanone	11 comps.
Benzene	1,2-Dichloroethane
2-Butanone (10 mg/mL)	1,1-Dichloroethene
Carbon tetrachloride	Tetrachloroethene
Chlorobenzene	Trichloroethene
Chloroform	Vinyl chloride
1,4-Dichlorobenzene	

Semi-Volatile Spiking Mix

TCLP-BNA	1 x 1 mL
TCLP-BNA-PAK	5 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	13 comps.
<i>o</i> -Cresol	Hexachloroethane
<i>m</i> -Cresol	Nitrobenzene
<i>p</i> -Cresol	Pentachlorophenol
1,4-Dichlorobenzene	Pyridine
2,4-Dinitrotoluene	2,4,5-Trichlorophenol
Hexachlorobenzene	2,4,6-Trichlorophenol
Hexachlorobutadiene	

Semi-Volatile Spiking Set

TCLP-BNA-SET set of 2 x 1 mL
(TCLP-A and TCLP-BN)

TCLP-A	1 x 1 mL
TCLP-A-PAK	5 x 1 mL
2.0 mg/mL each in MeOH	6 comps.
<i>o</i> -Cresol	Pentachlorophenol
<i>m</i> -Cresol	2,4,5-Trichlorophenol
<i>p</i> -Cresol	2,4,6-Trichlorophenol

TCLP-BN	1 x 1 mL
TCLP-BN-PAK	5 x 1 mL
2.0 mg/mL each in Acetone	7 comps.
1,4-Dichlorobenzene	Hexachloroethane
2,4-Dinitrotoluene	Nitrobenzene
Hexachlorobenzene	Pyridine
Hexachlorobutadiene	

2-Part Label System

Smudgeproof, tear and solvent resistant *
(Organic products in ampules)

Part One can be placed into a laboratory journal to document the standard used for the analysis. This label section includes the catalog number, description, lot number, expiration date, safety information, proper storage conditions and documents AccuStandard as the manufacturer.

Part Two duplicates required information for labeling transfer vial(s) with correct information.

* Includes the most common solvents: Methylene chloride, Methanol and Acetone

Pesticide Spiking Mix

TCLP-PES	1 x 1 mL
TCLP-PES-PAK	5 x 1 mL
2.0 mg/mL each in MeOH, except Toxaphene	7 comps.
Chlordane	Lindane
Endrin	Methoxychlor
Heptachlor	Toxaphene (4.0 mg/mL)
Heptachlor epoxide	

Pesticide Spiking Set

TCLP-PES-1/2-SET set of 2 x 1 mL
(CLP-PES-1 and TCLP-PES-2)

TCLP-PES-1	1 x 1 mL
TCLP-PES-1-PAK	5 x 1 mL
2.0 mg/mL each in MeOH	5 comps.
Endrin	Lindane
Heptachlor	Methoxychlor
Heptachlor epoxide	

TCLP-PES-2	1 x 1 mL
TCLP-PES-2-PAK	5 x 1 mL
At stated conc. in MeOH	2 comps.
Chlordane (2.0 mg/mL)	Toxaphene (4.0 mg/mL)

Herbicide, PFB Derivative Mix

TCLP-HERB-PFB	1 x 1 mL
0.1 mg/mL each in MtBE	2 comps.
2,4-D-PFB	2,4,5-TP-PFB

Herbicide, PFB Derivatives

M-8150-02-PFB	1 x 1 mL
0.1 mg/mL in MtBE	
2,4-D-PFB	
M-8150-04-PFB	1 x 1 mL
0.1 mg/mL in MtBE	
2,4,5-TP-PFB	

Herbicide Spiking Mixes

TCLP-HERB	1 x 1 mL
TCLP-HERB-PAK	5 x 1 mL
2.0 mg/mL each in MeOH	2 comps.
2,4-D	2,4,5-TP
TCLP-HERB-ME	1 x 1 mL
TCLP-HERB-ME-PAK	5 x 1 mL
2.0 mg/mL each in MeOH	2 comps.
2,4-D, Me	2,4,5-TP, Me



Method 1311 TCLP continued
on next page

Method 1311 TCLP Regulatory Level Mixtures

Volatiles

TCLP-QC *

TCLP-QC-PAK *

At stated conc. in MeOH

SAVE

1 x 1 mL

5 x 1 mL

10 comps.

Benzene (5 µg/mL)	1,2-Dichloroethane (5 µg/mL)
2-Butanone (2000 µg/mL)	1,1-Dichloroethene (7 µg/mL)
Carbon tetrachloride (5 µg/mL)	Tetrachloroethene (7 µg/mL)
Chlorobenzene (1000 µg/mL)	Trichloroethene (5 µg/mL)
Chloroform (60 µg/mL)	Vinyl chloride (2 µg/mL)

Pesticides

TCLP-PES-1-QC

TCLP-PES-1-QC-PAK

At stated conc. in MeOH

SAVE

1 x 1 mL

5 x 1 mL

5 comps.

Endrin (0.2 µg/mL)	Lindane (4.0 µg/mL)
Heptachlor (0.4 µg/mL)	Methoxychlor (100 µg/mL)
Heptachlor epoxide (0.04 µg/mL)	

TCLP-PES-2-QC

TCLP-PES-2-QC-PAK

At stated conc. in MeOH

SAVE

1 x 1 mL

5 x 1 mL

2 comps.

Chlordane (0.3 µg/mL)	Toxaphene (5.0 µg/mL)
-----------------------	-----------------------

Pesticide Set

TCLP-PES-1/2-QC-SET

set of 2 x 1 mL

(includes TCLP-PEST-1-QC & TCLP-PEST-2-QC)

Semi-Volatiles

TCLP-BNA-QC

At stated conc. in CH₂Cl₂

1 x 1 mL

13 comps.

<i>o</i> -Cresol (2000 µg/mL)	Hexachloroethane (30 µg/mL)
<i>m</i> -Cresol (2000 µg/mL)	Nitrobenzene (20 µg/mL)
<i>p</i> -Cresol (2000 µg/mL)	Pentachlorophenol (1000 µg/mL)
1,4-Dichlorobenzene (75 µg/mL)	Pyridine (50 µg/mL)
2,4-Dinitrotoluene (1.3 µg/mL)	2,4,5-Trichlorophenol (4000 µg/mL)
Hexachlorobenzene (1.3 µg/mL)	2,4,6-Trichlorophenol (20 µg/mL)
Hexachlorobutadiene (5 µg/mL)	

Herbicides

TCLP-HERB-ME-QC

TCLP-HERB-ME-QC-PAK

At stated conc. in MeOH

SAVE

1 x 1 mL

5 x 1 mL

2 comps.

Concentration as Methyl Derivative		as Acid
2,4-D, ME (106.3 µg/mL)		(100 µg/mL)
2,4,5-TP, ME (10.5 µg/mL)		(10 µg/mL)

* ColdPAK required to maintain integrity of product.

Method 1312 Synthetic Leaching Procedure

Semi-Volatiles

TCLP-BNA-1312

TCLP-BNA-1312-PAK

2.0 mg/mL each in CH₂Cl₂

SAVE

1 x 1 mL

5 x 1 mL

14 comps.

Acenaphthene	2,4-Dinitrophenol
β-BHC	2,4-Dinitrotoluene
γ-BHC	<i>o</i> -Cresol
bis-2-Chloroethyl ether	2,4-Dimethylphenol
2-Chlorophenol	Hexachlorobenzene
1,2-Dichlorobenzene	Hexachlorobutadiene
1,4-Dichlorobenzene	Nitrobenzene



EPA Method 1600 Series

Dioxins and Furans

1600

Method 1613

Method	Description	183-194
1613	Dioxins & Furans (HRGC/HRMS)	183
1614	Polybrominated Diphenyl Ethers	184
1618	Organochloride & Phosphorus Pesticides	185
1653	Chlorinated Phenolics in Pulp & Paper	186
1656	Organo Halide Pesticides	186-187
1657	Organo Phosphorus Pesticides	188
1658	Phenoxy - acid Herbicides	189
1659	Dazomet	189
1664	Oil and Grease	189
1665	PMI Semi-Volatiles (GC/MS)	189
1666A	PMI Volatiles (GC/MS)	190
1667A	PMI Pollutants (HPLC)	191
1668	209 PCB Congeners (GC)	192-193
1671	PMI Semi-Volatiles (GC/FID)	194
1673	PEG-600 (HPLC)	194

Method 1613 Dioxins & Furans by HRGC/HRMS

Precision and Recovery Standard

M-1613-PAR Bold (-04)

M-1613-PAR-PAK

All units in ng/mL in Nonane

1 x 1 mL
5 x 1 mL
17 comps.

M-1613-CAL	-01	-02	-03	-04	-05
2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.5	2	10	40	200
2,3,7,8-Tetrachlorodibenzofuran	0.5	2	10	40	200
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	2.5	10	50	200	1000
1,2,3,7,8-Pentachlorodibenzofuran	2.5	10	50	200	1000
2,3,4,7,8-Pentachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	2.5	10	50	200	1000
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	2.5	10	50	200	1000
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	2.5	10	50	200	1000
1,2,3,4,7,8-Hexachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,6,7,8-Hexachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,7,8,9-Hexachlorodibenzofuran	2.5	10	50	200	1000
2,3,4,6,7,8-Hexachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	2.5	10	50	200	1000
1,2,3,4,6,7,8-Heptachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,4,7,8,9-Heptachlorodibenzofuran	2.5	10	50	200	1000
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	5	20	100	400	2000
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	5	20	100	400	2000

Calibration Set

M-1613-CAL-SET

All in ng/mL in Nonane

5 x 1 mL
M-1613-CAL-01, M-1613-CAL-02, M-1613-CAL-03
M-1613-CAL-04, M-1613-CAL-05

Technical Note

Native Solutions of the USEPA Method 1613 analytes can also be used for USEPA Method 23, 8280, 8290, EU Method EN-1948 and Japanese Methods JIS-K0311 and JIS-K0312.

2,3,7,8 Isomers only Mix

This solution is for those labs only determining the concentration of the two most toxic isomers.

M-1613-DF

40 ng/mL each in Nonane

1 x 1 mL
2 comps.

2,3,7,8-Tetrachlorodibenzo-p-dioxin
2,3,7,8-Tetrachlorodibenzofuran



Thousands of Standards, just a click away

AccuStandard.com

EPA Method 1600 Series

Bromodiphenyl Ethers

Method 1614 Bromodiphenyl Ether Mixtures

Responding to the need for the analysis of polybrominated diphenyl ether (PBDE) congeners, the EPA has developed Method 1614. Method 1614 is recommended for analysis of aqueous, solid, tissue, and multi-phase environmental samples. AccuStandard has the largest offering of synthesized PBDEs - see Flame Retardant section for complete listing.

PBDEs Standard Solution for Accuracy & Precision

At stated conc. in Isooctane

39 comps.

	BDE-AAP-A 1 mL ng/mL	BDE-AAP-A-15X 1 mL µg/mL
2-Bromodiphenyl ether (#1)	100	1.5
3-Bromodiphenyl ether (#2)	100	1.5
4-Bromodiphenyl ether (#3)	100	1.5
2,4-Dibromodiphenyl ether (#7)	100	1.5
2,4'-Dibromodiphenyl ether (#8)	100	1.5
2,6-Dibromodiphenyl ether (#10)	100	1.5
3,3'-Dibromodiphenyl ether (#11)	100	1.5
3,4-Dibromodiphenyl ether (#12)	100	1.5
3,4'-Dibromodiphenyl ether (#13)	100	1.5
4,4'-Dibromodiphenyl ether (#15)	100	1.5
2,2',4-Tribromodiphenyl ether (#17)	100	1.5
2,3',4-Tribromodiphenyl ether (#25)	100	1.5
2,4,4'-Tribromodiphenyl ether (#28)	100	1.5
2,4,6-Tribromodiphenyl ether (#30)	100	1.5
2,4',6-Tribromodiphenyl ether (#32)	100	1.5
2',3,4-Tribromodiphenyl ether (#33)	100	1.5
3,3',4-Tribromodiphenyl ether (#35)	100	1.5
3,4,4'-Tribromodiphenyl ether (#37)	100	1.5
2,2',4,4'-Tetrabromodiphenyl ether (#47)	100	1.5
2,2',4,5'-Tetrabromodiphenyl ether (#49)	100	1.5
2,3',4,4'-Tetrabromodiphenyl ether (#66)	100	1.5
2,3',4',6-Tetrabromodiphenyl ether (#71)	100	1.5
2,4,4',6-Tetrabromodiphenyl ether (#75)	100	1.5
3,3',4,4'-Tetrabromodiphenyl ether (#77)	100	1.5
2,2',3,4,4'-Pentabromodiphenyl ether (#85)	150	2.25
2,2',4,4',5-Pentabromodiphenyl ether (#99)	150	2.25
2,2',4,4',6-Pentabromodiphenyl ether (#100)	150	2.25
2,3,4,5,6-Pentabromodiphenyl ether (#116)	150	2.25
2,3',4,4',5-Pentabromodiphenyl ether (#118)	150	2.25
2,3',4,4',6-Pentabromodiphenyl ether (#119)	150	2.25
3,3',4,4',5-Pentabromodiphenyl ether (#126)	150	2.25
2,2',3,4,4',5'-Hexabromodiphenyl ether (#138)	200	3.0
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	200	3.0
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	200	3.0
2,2',4,4',6,6'-Hexabromodiphenyl ether (#155)	200	3.0
2,3,4,4',5,6-Hexabromodiphenyl ether (#166)	200	3.0
2,2',3,4,4',5,6-Heptabromodiphenyl ether (#181)	250	3.75
2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183)	250	3.75
2,3,3',4,4',5,6-Heptabromodiphenyl ether (#190)	250	3.75

Commonly Occurring PBDE Congeners for Precision and Recovery

BDE-COC

At stated conc. in Isooctane

1 x 1 mL

14 comps.

	µg/mL
2,2',4-Tribromodiphenyl ether (#17)	5
2,4,4'-Tribromodiphenyl ether (#28)	5
2,2',4,4'-Tetrabromodiphenyl ether (#47)	5
2,3',4,4'-Tetrabromodiphenyl ether (#66)	5
2,3',4',6-Tetrabromodiphenyl ether (#71)	5
2,2',3,4,4'-Pentabromodiphenyl ether (#85)	5
2,2',4,4',5-Pentabromodiphenyl ether (#99)	5
2,2',4,4',6-Pentabromodiphenyl ether (#100)	5
2,2',3,4,4',5'-Hexabromodiphenyl ether (#138)	5
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	5
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	5
2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183)	5
2,3,3',4,4',5,6-Heptabromodiphenyl ether (#190)	5
Decabromodiphenyl ether (#209)	25

PBDE Congeners of Primary Interest

BDE-CSM

At stated conc. in Isooctane:Toluene

1 x 1 mL

8 comps.

	µg/mL
2,4,4'-Tribromodiphenyl ether (#28)	20
2,2',4,4'-Tetrabromodiphenyl ether (#47)	20
2,2',4,4',5-Pentabromodiphenyl ether (#99)	20
2,2',4,4',6-Pentabromodiphenyl ether (#100)	20
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	20
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	20
2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183)	20
Decabromodiphenyl ether (#209)	200

Calibration Mix

BDE-CM

At stated conc. in Isooctane

1 x 1 mL

8 comps.

Matrix Spiking Solution

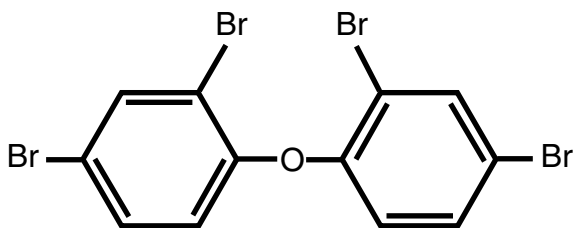
BDE-MS

At stated conc. in Isooctane

1 x 1 mL

8 comps.

	BDE-CM µg/mL	BDE-MS ng/mL
2,4,4'-Tribromodiphenyl ether (#28)	2.5	1
2,2',4,4'-Tetrabromodiphenyl ether (#47)	2.5	1
2,2',4,4',5-Pentabromodiphenyl ether (#99)	2.5	1
2,2',4,4',6-Pentabromodiphenyl ether (#100)	2.5	1
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	2.5	1
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	2.5	1
2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183)	2.5	1
Decabromodiphenyl ether (#209)	25	10



EPA Method 1600 Series

Pesticides and Herbicides

1600

Method 1618 Organo-halide, Organo-phosphorus Pesticides and Phenoxyacid Herbicides by Wide Bore Capillary Column GC

Method 1618 was developed by the Industrial Technology Division (ITD) within the United States Environmental Protection Agency's (US EPA) Office of Water Regulations and Standards (OWRS) to provide improved precision and accuracy of analysis of pollutants in aqueous and solid matrices in order to determine the level of these pollutants in industrial discharges. Method 1618 is used with wide bore GC columns to analyze for organo-halide and organo-phosphorus pesticides, phenoxy-acid herbicides and herbicide esters, polychlorinated biphenyls (PCBs) and other compounds amenable to extraction and analysis by wide bore capillary column gas chromatography with halogen-specific and organo-phosphorus detectors.

The chemical compounds in the AccuStandard mixtures that follow may be determined in waters, soils, sediments and sludges by this method. The method is a consolidation of EPA Methods 608, 608.1, 614, 615, 617, 622 and 701.

Organochlorine Pesticides

M-1618-1 1 x 1 mL
M-1618-1-PAK 5 x 1 mL
At stated conc. in Isooctane 14 comps.

Aldrin (100 ng/mL)	Endosulfan II (200 ng/mL)
Captan (200 ng/mL)	Endrin aldehyde (100 ng/mL)
Chlorobenzilate (500 ng/mL)	Heptachlor (100 ng/mL)
Diallate (250 ng/mL)	Heptachlor epoxide (100 ng/mL)
p,p'-DDE (200 ng/mL)	Lindane (100 ng/mL)
p,p'-DDT (200 ng/mL)	Methoxychlor (200 ng/mL)
Endosulfan I (200 ng/mL)	Isodrin (100 ng/mL)

M-1618-2 1 x 1 mL
At stated conc. in Isooctane 16 comps.

α-BHC (100 ng/mL)	Dichlone (100 ng/mL)
β-BHC (100 ng/mL)	Dieldrin (100 ng/mL)
δ-BHC (100 ng/mL)	Endrin (100 ng/mL)
α-Chlordane (100 ng/mL)	Endosulfan sulfate (100 ng/mL)
γ-Chlordane (100 ng/mL)	Endrin ketone (100 ng/mL)
Carbophenothion (1000 ng/mL)	Mirex (100 ng/mL)
Captafol (200 ng/mL)	PCNB (100 ng/mL)
p,p'-DDD (100 ng/mL)	Trifluralin (200 ng/mL)

Organophosphate Pesticides

M-1618-3 1 x 1 mL
At stated conc. in Isooctane 19 comps.

Azinphos methyl (100 ng/mL)	Mephos (200 ng/mL)
Coumaphos (50 ng/mL)	Methyl parathion (100 ng/mL)
Diazinon (100 ng/mL)	Malathion (100 ng/mL)
Dichlorvos (50 ng/mL)	Phorate (100 ng/mL)
Dimethoate (100 ng/mL)	Ronnel (100 ng/mL)
EPN (100 ng/mL)	Sulprofos (50 ng/mL)
Ethyl parathion (100 ng/mL)	Terbufos (100 ng/mL)
Ethoprop (100 ng/mL)	Tetrachlorvinphos (100 ng/mL)
Ethyl azinphos (100 ng/mL)	Trichlorofon (100 ng/mL)
Fensulfothion (200 ng/mL)	

M-1618-4 1 x 1 mL
At stated conc. in Isooctane 16 comps.

Chlorfenvinphos (50 ng/mL)	Ethion (100 ng/mL)
Chlorpyrifos (50 ng/mL)	Famphur (200 ng/mL)
Chlorpyrifos methyl (100 ng/mL)	Fenthion (100 ng/mL)
Crotoxyphos (200 ng/mL)	Leptophos (100 ng/mL)
Dichlorofenthion (100 ng/mL)	Mevinphos (100 ng/mL)
Demeton (400 ng/mL)	Naled (100 ng/mL)
Dioxathion (600 ng/mL)	Phosmet (200 ng/mL)
Disulfoton (100 ng/mL)	Sulfotep (50 ng/mL)

Phenoxyacid Herbicides

M-8150M 1 x 1 mL
M-8150M-PAK 5 x 1 mL
20 µg/mL each in Hexane 8 comps.

2,4-D	Dalapon
2,4-DB	Dicamba
2,4,5-T	Dichlorprop
2,4,5-TP	Dinoseb

M-8150M-2 1 x 1 mL
M-8150M-2-PAK 5 x 1 mL
2.0 mg/mL in Hexane 2 comps.

MCPA	MCPP
------	------

Surrogate Standards

Organochlorine Pesticide
M-1618-SS 1 x 1 mL
M-1618-SS-PAK 5 x 1 mL
2 µg/mL in Acetone
 Dibutylchlorendate

Organophosphate Pesticide

M-1618-SP 1 x 1 mL
2 µg/mL each in Acetone 2 comps.
 Tributyl phosphate Triphenyl phosphate

Phenoxyacid Herbicide

M-1618-SA 1 x 1 mL
2 µg/mL in Acetone
 2,4-Dichlorophenyl acetic acid

Decomposition Solution

M-1618D * 1 x 1 mL
M-1618D-PAK * 5 x 1 mL
At stated conc. in Acetone 2 comps.
 p,p'-DDT (2.0 µg/mL) Endrin (1.0 µg/mL)

GPC Calibration Solution

M-1618-GP-5ML 1 x 5 mL
At stated conc. in Acetone 5 comps.
 Corn oil (300.0 mg/mL) Perylene (0.1 mg/mL)
 bis(2-Ethylhexyl)phthalate (15.0 mg/mL) Sulfur (0.5 mg/mL)
 Pentachlorophenol (1.4 mg/mL)

SPE Cartridge Calibration Solution

M-1618-SE 1 x 1 mL
M-1618-SE-PAK 5 x 1 mL
0.1 µg/mL in Acetone
 2,4,6-Trichlorophenol

* ColdPAK required to maintain integrity of product.

Method 1618

EPA Method 1600 Series

Chlorinated Phenolics and Pesticides

Method 1653 Chlorinated Phenolics in Pulp and Paper Effluents

Method 1653 is designed to determine Chlorinated Phenolics (chlorinated phenols, guaiacols, catechols, vanillins, syringaldehydes) and other compounds in wastewater amenable to in-situ acetylation and analysis by GC/MS.

M-1653A-D-R-SET set of 4 x 1 mL (M-1653A, M-1653B, M-1653C, M-1653D-AC)

M-1653A 1 x 1 mL
M-1653A-PAK **SAVE** 5 x 1 mL
 0.1 mg/mL each in MeOH 7 comps.

4-Chlorophenol	2,4,6-Trichlorophenol
2,4-Dichlorophenol	2,3,4,6-Tetrachlorophenol
2,6-Dichlorophenol	Pentachlorophenol
2,4,5-Trichlorophenol	

M-1653B 1 x 1 mL
 0.1 mg/mL each in MeOH 8 comps.

4-Chloroguaiacol	3,4,5-Trichloroguaiacol
3,4-Dichloroguaiacol	3,4,6-Trichloroguaiacol
4,5-Dichloroguaiacol	4,5,6-Trichloroguaiacol
4,6-Dichloroguaiacol	Tetrachloroguaiacol

M-1653C 1 x 1 mL
 0.1 mg/mL each in MeOH 7 comps.

4-Chlorocatechol	3,4,5-Trichlorocatechol
3,4-Dichlorocatechol	3,4,6-Trichlorocatechol
3,6-Dichlorocatechol	Tetrachlorocatechol
4,5-Dichlorocatechol	

M-1653D-AC 1 x 1 mL
 0.1 mg/mL each in Acetone 6 comps.

5-Chlorovanillin	2-Chlorosyringaldehyde
6-Chlorovanillin	2,6-Dichlorosyringaldehyde
5,6-Dichlorovanillin	Trichlorosyringol

Internal Standard

M-1653-IS 1 x 1 mL

1.0 mg/mL in MeOH

M-1653-IS-R 1 x 1 mL

1.0 mg/mL in Acetone

3,4,5-Trichlorophenol

Instrument Internal Standard

M-1653-IIS 1 x 1 mL

1.0 mg/mL in MeOH

M-1653-IIS-R 1 x 1 mL

5.0 mg/mL in Acetone

2,2'-Difluorobiphenyl

M-1653A-D-R2-SET set of 4 x 1 mL (M-1653A-R, M-1653B-R, M-1653C-R, M-1653D-R)

M-1653A-R 1 x 1 mL
 At stated conc. in Acetone 7 comps.

4-Chlorophenol (25 µg/mL)	2,4,6-Trichlorophenol (50 µg/mL)
2,4-Dichlorophenol (50 µg/mL)	2,3,4,6-Tetrachlorophenol (50 µg/mL)
2,6-Dichlorophenol (50 µg/mL)	Pentachlorophenol (100 µg/mL)
2,4,5-Trichlorophenol (50 µg/mL)	

M-1653B-R 1 x 1 mL
 At stated conc. in Acetone 8 comps.

4-Chloroguaiacol (25 µg/mL)	3,4,5-Trichloroguaiacol (50 µg/mL)
3,4-Dichloroguaiacol (50 µg/mL)	3,4,6-Trichloroguaiacol (50 µg/mL)
4,5-Dichloroguaiacol (50 µg/mL)	4,5,6-Trichloroguaiacol (50 µg/mL)
4,6-Dichloroguaiacol (50 µg/mL)	Tetrachloroguaiacol (100 µg/mL)

M-1653C-R 1 x 1 mL
 At stated conc. in Acetone 7 comps.

4-Chlorocatechol (25 µg/mL)	3,4,5-Trichlorocatechol (100 µg/mL)
3,4-Dichlorocatechol (50 µg/mL)	3,4,6-Trichlorocatechol (100 µg/mL)
3,6-Dichlorocatechol (50 µg/mL)	Tetrachlorocatechol (100 µg/mL)
4,5-Dichlorocatechol (50 µg/mL)	

M-1653D-R 1 x 1 mL
 At stated conc. in Acetone 6 comps.

5-Chlorovanillin (50 µg/mL)	2-Chlorosyringaldehyde (50 µg/mL)
6-Chlorovanillin (50 µg/mL)	2,6-Dichlorosyringaldehyde (100 µg/mL)
5,6-Dichlorovanillin (100 µg/mL)	Trichlorosyringol (50 µg/mL)

US EPA Pulp, Paper & Paperboard Cluster Rule

M-PAPCLUS 1 x 1 mL

M-PAPCLUS-PAK **SAVE** 5 x 1 mL

0.1 mg/mL each in Water

Methanol	Propionaldehyde
Acetaldehyde	Methyl ethyl ketone

Instrument Performance Check Solution

M-1653-TS 1 x 1 mL

50 µg/mL in Acetone

DFTPP

Method 1656 Organo-Halide Pesticides in Municipal & Industrial Wastewater by HSD

Method 1656 is a consolidation of several EPA wastewater methods used to determine the organo-halide pesticides and polychlorinated biphenyls (PCBs) associated with the Clean Water Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response, Compensation and Liability Act; and other compounds amenable to extraction and analysis by wide-bore capillary column GC with a HSD.

GPC Calibration Solution

M-1600-GPC-5ML 1 x 5 mL
 At stated conc. in CH₂Cl₂ 5 comps.

Corn oil (300 mg/mL)	Perylene (0.1 mg/mL)
bis(2-Ethylhexyl)phthalate (15 mg/mL)	Sulfur (0.5 mg/mL)
Pentachlorophenol (1.4 mg/mL)	

Solid-phase Extraction Cartridge Calibration Solution

M-1600-SPE 1 x 1 mL

0.1 mg/mL in Acetone

2,4,6-Trichlorophenol

Decomposition Test Solution

M-1656-DS 1 x 1 mL

At stated conc. in Isooctane

4,4'-DDT (2 µg/mL) Endrin (1 µg/mL)

Surrogate Spiking Solutions

CLP-PES-A 1 x 1 mL
 0.2 mg/mL in Acetone

Dibutylchlorendate

CLP-032-R 1 x 1 mL
 0.2 mg/mL each in Acetone 2 comps.

Decachlorobiphenyl Tetrachloro-*m*-xylene

CLP-034 1 x 1 mL
 0.2 mg/mL each in Acetone 2 comps.

Dibutylchlorendate Tetrachloro-*m*-xylene

Method 1656 (continued) Calibration Solutions & Suggested Calibration Groups

M-1656-CAL-SET

7 x (3 x 1 mL) (contains all 7 calibration groups at respective low, medium and high ranges)

Calibration Group 1

M-1656-01-CAL-SET

3 x 1 mL

All solutions in Isooctane

14 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
Acephate	2,000	10,000	40,000
Alachlor	20	100	400
Atrazine	1,000	5,000	20,000
β-BHC	10	50	200
Bromoxynil octanoate	50	250	1,000
Captafol	200	1,000	4,000
Diallate	200	1,000	4,000
Decachlorobiphenyl	10	50	200
Endosulfan sulfate	10	50	200
Endrin	20	100	400
Isodrin	10	50	200
Pendimethalin	50	250	1,000
Permethrin (cis & trans) *200	1,000	4,000	
Tetrachloro- <i>m</i> -xylene	5	25	100

* Actual isomer concentration is stated
on certificate of product data

Calibration Group 2

M-1656-02-CAL-SET

3 x 1 mL

All solutions in Isooctane

11 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
α-BHC	5	25	100
DCPA	5	25	100
4,4'-DDE	10	50	200
4,4'-DDT	10	50	200
Decachlorobiphenyl	10	50	200
Dichloro	20	100	400
Ethalfuralin	10	50	200
Fenarimol	20	100	400
Methoxychlor	20	100	400
Metribuzin	10	50	200
Tetrachloro- <i>m</i> -xylene	5	25	100



Calibration Group 3

M-1656-03-CAL-SET

3 x 1 mL

All solutions in Isooctane

10 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
γ-BHC	5	25	100
γ-Chlordane	5	25	100
Decachlorobiphenyl	10	50	200
Endrin ketone	10	50	200
Heptachlor epoxide	5	25	100
Isopropalin	20	100	400
Nitrofen	20	100	400
PCNB	5	25	100
Tetrachloro- <i>m</i> -xylene	5	25	100
Trifluralin	10	50	200

Calibration Group 4

M-1656-04-CAL-SET

3 x 1 mL

All solutions in Isooctane

10 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
Benfluralin	20	100	400
Chlorobenzilate	50	250	1,000
Decachlorobiphenyl	10	50	200
Dieldrin	5	25	100
Endosulfan I	10	50	200
Mirex	20	100	400
Terbacil	200	1,000	4,000
Terbuthylazine	500	2,500	10,000
Tetrachloro- <i>m</i> -xylene	5	25	100
Triadimefon	100	500	2,000

Calibration Group 5

M-1656-05-CAL-SET

3 x 1 mL

All solutions in Isooctane

8 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
Benfluralin	20	100	400
Captan	100	500	2,000
Chlorothalonil	20	100	400
4,4'-DDD	20	100	400
Decachlorobiphenyl	10	50	200
Norflurazon	100	500	2,000
Simazine	800	4,000	16,000
Tetrachloro- <i>m</i> -xylene	5	25	100

Calibration Group 6

M-1656-06-CAL-SET

3 x 1 mL

All solutions in Isooctane

9 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
Aldrin	20	100	400
δ-BHC	5	25	100
Bromacil	100	500	2,000
Butachlor	50	250	1,000
Decachlorobiphenyl	10	50	200
Endosulfan II	10	50	200
Heptachlor	10	50	200
Kepone	100	500	2,000
Tetrachloro- <i>m</i> -xylene	5	25	100

Calibration Group 7

M-1656-07-CAL-SET

3 x 1 mL

All solutions in Isooctane

13 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
Carbophenothion	80	400	1,600
Chloroneb	300	1,500	6,000
Chloropropylate	200	1,000	4,000
DBCP	25	125	500
Decachlorobiphenyl	10	50	200
Dicofol	300	1,500	6,000
Endrin aldehyde	80	400	1,600
Etridiazole	80	400	1,600
Perthane	1,000	5,000	20,000
Propachlor	500	2,500	10,000
Propanil	200	1,000	4,000
Propazine	1,000	5,000	20,000
Tetrachloro- <i>m</i> -xylene	5	25	100

Method 1657 Organo-Phosphorus Pesticides in Municipal & Industrial Wastewater by FPD

Method 1657 is a consolidation of several EPA wastewater methods used to determine the organo-phosphorus pesticides associated with the Clean Water Act, the Resource and Conservation and Recovery Act, & the Comprehensive Environmental Response, Compensation and Liability Act; and other compounds amenable to extraction and analysis by wide-bore capillary column gas chromatography with a flame photometric detector (FPD).

GPC Calibration Solution

M-1600-GPC-5ML 1 x 5 mL
At stated conc. in CH_2Cl_2 5 comps.

Corn oil	(300 mg/mL)
bis(2-Ethylhexyl)phthalate	(15 mg/mL)
Pentachlorophenol	(1.4 mg/mL)
Perylene	(0.1 mg/mL)
Sulfur	(0.5 mg/mL)

Solid-phase Extraction Cartridge Calibration Solution

M-1600-SPE 1 x 1 mL

0.1 mg/mL in Acetone
2,4,6-Trichlorophenol

Surrogate Spiking Solution

M-1657-SS 1 x 1 mL
0.2 mg/mL each in Acetone 2 comps.

Tributyl phosphate
Triphenyl phosphate

Method 1657 Calibration Solutions & Suggested Calibration Groups

Calibration Group 1

M-1657-01-R1-CAL-SET 3 x 1 mL
All solutions in Isooctane 9 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
Azinphos methyl	100	500	2,000
Dichlorvos	500	2,500	10,000
Disulfoton	200	1,000	4,000
Fenthion	200	1,000	4,000
Merphos (A + B)	400	2,000	8,000
Ronnel	200	1,000	4,000
Sulprofos	200	1,000	4,000
Tributyl phosphate	200	1,000	4,000
Triphenyl phosphate	200	1,000	4,000
Low	M-1657-01-R1-1X		1 mL
Medium	M-1657-01-R1-5X		1 mL
High	M-1657-01-R1-20X		1 mL

Calibration Group 2

M-1657-02-CAL-SET 3 x 1 mL
All solutions in Isooctane 12 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
Chlorfevinphos	200	1,000	4,000
Chlorpyrifos	200	1,000	4,000
Demeton (O + S)	400	2,000	8,000
Dichlofenthion	200	1,000	4,000
Dimethoate	100	500	2,000
Famphur	500	2,500	10,000
Leptophos	200	1,000	4,000
Methyl parathion	200	1,000	4,000
Tributyl phosphate	200	1,000	4,000
Trichlorofon	500	2,500	10,000
Tricresylphosphate	100	500	2,000
Triphenyl phosphate	200	1,000	4,000
Low	M-1657-02-1X		1 mL
Medium	M-1657-02-5X		1 mL
High	M-1657-02-20X		1 mL

Calibration Group 3

M-1657-03-CAL-SET 3 x 1 mL
All solutions in Isooctane 14 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
Azinphos ethyl	200	1,000	4,000
Crotoxyphos	500	2,500	10,000
DEF	200	1,000	4,000
Fensulfothion	500	2,500	10,000
Methyl chlorpyrifos	200	1,000	4,000
Mevinphos	500	2,500	10,000
Naled	500	2,500	10,000
Parathion	200	1,000	4,000
Phosmet	500	2,500	10,000
Phosphamidon (E + Z)	100	500	2,000
Sulfotepp	200	1,000	4,000
Terbufos	200	1,000	4,000
Tributyl phosphate	200	1,000	4,000
Triphenyl phosphate	200	1,000	4,000
Low	M-1657-03-1X		1 mL
Medium	M-1657-03-5X		1 mL
High	M-1657-03-20X		1 mL

M-1657-CAL-SET 4 x (3 x 1 mL)
Contains all 4 calibration groups at
Low, Medium and High Ranges

Calibration Group 4

M-1657-04-CAL-SET 3 x 1 mL
All solutions in Isooctane 11 comps.

Components (units in ng/mL)	Low (1X)	Medium (5X)	High (20X)
Coumaphos	500	2,500	10,000
Diazinon	200	1,000	4,000
EPN	200	1,000	4,000
Ethion	200	1,000	4,000
Ethoprop	200	1,000	4,000
Malathion	200	1,000	4,000
Phorate	200	1,000	4,000
Tetrachlorvinphos	200	1,000	4,000
Tributyl phosphate	200	1,000	4,000
Trichloronate	200	1,000	4,000
Triphenyl phosphate	200	1,000	4,000
Low	M-1657-04-1X		1 mL
Medium	M-1657-04-5X		1 mL
High	M-1657-04-20X		1 mL



Method 1658 Phenoxy-Acid Herbicides

Method 1658 consolidates several EPA wastewater methods used to determine Phenoxy-Acid Herbicides & Herbicide esters associated with the CWA, RCRA, & CERCLA; & other compounds amenable to extraction & analysis by wide-bore capillary column GC/ECD.

M-1658-CAL-SET

All solutions in Isooctane

3 x 1 mL
12 comps.

Components (units in ng/mL)	Low (1X)	Medium (10X)	High (100X)
2,4-D	100	1,000	10,000
Dalapon	50	500	5,000
2,4-DB	200	2,000	20,000
2,4-Dichlorophenylacetic acid (Surrogate)	10	100	1,000
Dicamba	20	200	2,000
Dichlorprop	100	1,000	10,000
Dinoseb	50	500	5,000
MCPA	5,000	50,000	500,000
MCPP	5,000	50,000	500,000
Picloram	50	500	5,000
2,4,5-T	20	200	2,000
2,4,5-TP	20	200	2,000

Method 1659 Dazomet in Municipal & Industrial Wastewater by NPD

Method 1659 is used to determine Dazomet by base hydrolysis to Methyl Isothiocyanate (MITC) and subsequent determination of MITC by wide-bore fused-silica capillary column gas chromatography with a Nitrogen Phosphorus Detector (NPD).

Recovery & Precision Solution

M-1659-RPS

1 x 1 mL

25 µg/mL in Acetone

Methyl isothiocyanate (MITC)

Matrix Spiking Solution

M-1659-MS

1 x 1 mL

25 µg/mL in Acetone

Dazomet

Calibration Solutions

M-1659-CAL-SET

3 x 1 mL

M-1659-CAL-1X 0.2 mg/mL in Acetone

M-1659-CAL-5X 1.0 mg/mL in Acetone

M-1659-CAL-25X 5.0 mg/mL in Acetone

Methyl isothiocyanate (MITC)

Method 1664 See Petrochemical (page 324) or Inorganic (page 341) Sections

Method 1665 Semi-Volatile Organic Compounds Specific to the PMI by Isotope Dilution GC/MS

The following method series is designed to meet PMI (Pharmaceutical Manufacturing Industry) methods promulgated in 40 CFR part 136. It is used to monitor the discharge of pollutants into surface waters. It can also be used to identify and measure purgeable and non-purgeable volatiles, semi-volatiles, and certain organic pollutants specific to PMI discharge in water, soils, and municipal sludges.

GPC Calibration Solution

M-1618-GP-5ML

At stated conc. in Acetone

1 x 5 mL

5 comps.

Corn oil (300.0 mg/mL)
bis(2-Ethylhexyl)phthalate (15.0 mg/mL)
Pentachlorophenol (1.4 mg/mL)

Perylene (0.1 mg/mL)
Sulfur (0.5 mg/mL)

PMI Stock Standard

M-1665

2000 µg/mL each in CH₂Cl₂

1 x 1 mL

6 comps.

Aniline Dimethylformamide
N,N-Dimethylacetamide 2-Picoline
N,N-Dimethylaniline Pyridine

Instrument Performance Check Solution

M-1653-TS

50 µg/mL in Acetone

1 x 1 mL

DFTPP

PMI Labeled Stock Standard (Not for individual sale)

M-1665-LAB

500 µg/mL each in CH₂Cl₂

1 x 1 mL

5 comps.

Aniline-d₅ 2-Picoline-d₅
N,N-Dimethylaniline-d₅ Pyridine-d₅
Dimethylformamide-d₅

PMI Internal Standard

M-625-07-10X

2.0 mg/mL in CH₂Cl₂

1 x 1 mL

2,2'-Difluorobiphenyl

PMI Semi-Volatile Set

M-1665-SET

5 x 1 mL

(M-1618-GP-5ML, M-1653-TS, M-625-07-10X, M-1665, M-1665-LAB)

EPA Method 1600 Series

Pharmaceutical Waste Discharge Standards

Method 1666A (Rev. July 1998) Volatile Organic Compounds Specific to the PMI by Isotope Dilution GC/MS

M-1666A-SSA-ADD
1000 µg/mL in MeOH
Isopropyl ether

1 x 1 mL

PMI Stock Standard A

M-1666A-SSA-R2
At stated conc. in Water

1 x 1 mL
7 comps.

1-Butanol	(2500 µg/mL)	Isopropanol	(1000 µg/mL)
t-Butanol	(2500 µg/mL)	4-Methyl-2-pentanone	(1000 µg/mL)
2-Furaldehyde	(2500 µg/mL)	1-Pentanol	(2500 µg/mL)
Isobutyraldehyde	(2500 µg/mL)		

PMI Stock Standard B

M-1666A-SSB
At stated conc. in MeOH

1 x 1 mL
9 comps.

Cyclohexane	(1000 µg/mL)	Trifluoromethane	(1000 µg/mL)
N-Heptane	(1000 µg/mL)	m-Xylene	(1000 µg/mL)
n-Hexane	(1000 µg/mL)	o-Xylene	(1000 µg/mL)
Methyl formate	(2500 µg/mL)	p-Xylene	(1000 µg/mL)
Tetrahydrofuran	(1000 µg/mL)		

PMI Stock Standard C

M-1666A-SSC
1000 µg/mL each in MeOH

1 x 1 mL
4 comps.

Butyl acetate	Isopropyl acetate
Ethyl acetate	Pentyl acetate

PMI Labeled Stock Standard

M-1666A-LAB
At stated conc. in MeOH

1 x 1 mL
8 comps.

L-Butanol-d ₁₀	(500 µg/mL)	n-Hexane-d ₁₄	(50 µg/mL)
Cyclohexane-d ₁₂	(50 µg/mL)	Tetrahydrofuran-d ₈	(50 µg/mL)
Ethyl Acetate-c ₁₃	(50 µg/mL)	o-Xylene-d ₁₀	(50 µg/mL)
N-Heptane-d ₁₆	(50 µg/mL)	m-Xylene-d ₁₀	(50 µg/mL)

PMI Purgeable Analytes

M-1666A-R2-SET 5 x 1 mL
M-1666A-SSA-ADD, M-1666A-SSA-R2, M-1666A-SSB
M-1666A-SSC, M-1666A-LAB

PMI Standard Direct Injection

M-1666A-DI-R1
At stated conc. in Water

1 x 1 mL
10 comps.

Acetonitrile	(1000 µg/mL)	Ethylene glycol	(2500 µg/mL)
Diethylamine	(2500 µg/mL)	Methanol	(1000 µg/mL)
Dimethylamine	(1000 µg/mL)	2-Methoxyethanol	(1000 µg/mL)
Dimethyl sulfoxide	(1000 µg/mL)	1-Propanol	(1000 µg/mL)
Ethanol	(1000 µg/mL)	Triethylamine	(2500 µg/mL)

M-1666A-DI-R-ADD1
2500 µg/mL in Water

1 x 1 mL

Methylamine

M-1666A-DI-R-ADD2
5000 µg/mL in Water

1 x 1 mL

Formamide

PMI Labeled Standard Direct Injection

M-1666A-DI-LAB
1000 µg/mL each in Water

1 x 1 mL
6 comps.

Acetonitrile-d ₃	Methanol-d ₃
Dimethyl sulfoxide-d ₆	n-Propanol-1-d ₁
Ethanol-d ₆	Tetrahydrofuran-d ₈

PMI Direct Injection Set

M-1666A-DI-R1-SET 4 x 1 mL
M-1666A-DI-R1, M-1666A-DI-R-ADD1
M-1666A-DI-R-ADD2, M-1666A-DI-LAB

PMI Instrument Performance

Purgeable Internal Standard

CLP-PI 1 x 1 mL
CLP-PI-PAK 5 x 1 mL
1.0 mg/mL each in MeOH 3 comps.

Bromochloromethane	1,4-Difluorobenzene
Chlorobenzene-d ₅	

PMI Resolution Standard

M-1666A-RES 1 x 1 mL
M-1666A-RES-PAK 5 x 1 mL
100 µg/mL each in MeOH 2 comps.

o-Xylene	o-Xylene-d ₁₀
----------	--------------------------

Instrument Performance Check Solution

CLP-004-10X 1 x 1 mL
CLP-004-10X-PAK 5 x 1 mL
250 µg/mL in MeOH

p-Bromofluorobenzene

Buy AccuPAKs™
Save 20-40% 5 x 1 mL



EPA Method 1600 Series

Pharmaceutical Waste Discharge Standards

1600

Method 1667A Formaldehyde, Isobutylaldehyde & Furfural by Derivatization followed by HPLC for PMI pollutants

PMI Carbonyl Set

M-1667A-SET

Each at 1.0 mg/mL in AcCN

3 x 1 mL

	Cat. No.	1 mL
Formaldehyde	M-1667A-01	
2-Furaldehyde	M-1667A-02	
Isobutylaldehyde	M-1667A-03	

PMI Carbonyl DNPH Set

M-1667A-DNPH-SET

Each at 1.0 mg/mL in AcCN

3 x 1 mL

	Cat. No.	1 mL
Formaldehyde-DNPH	M-1667A-DNPH-01	
2-Furaldehyde-DNPH	M-1667A-DNPH-02	
Isobutylaldehyde-DNPH	M-1667A-DNPH-03	

PMI QA/QC Carbonyl Mixture

M-1667A-M

M-1667A-M-PAK

250 µg/mL each in AcCN

SAVE

1 x 1 mL

5 x 1 mL

3 comps.

Formaldehyde
2-Furaldehyde

Isobutylaldehyde

PMI QA/QC Carbonyl Derivative DNPH Mixture

M-1667A-DNPH

M-1667A-DNPH-PAK

250 µg/mL each in AcCN

SAVE

1 x 1 mL

5 x 1 mL

3 comps.

Formaldehyde-DNPH
2-Furaldehyde-DNPH

Isobutylaldehyde-DNPH

PMI Derivatization Reagent

M-1667A-DERV-10ML

M-1667A-DERV-10ML-PAK

1.0 mg/mL in AcCN

SAVE

10 mL

5 x 10 mL

2,4-Dinitrophenylhydrazine (DNPH)

2-Part Label System

Smudgeproof, tear and solvent resistant * (Organic products in ampules)

Part One can be placed into a laboratory journal to document the standard used for the analysis.

This label section includes the catalog number, description, lot number, expiration date, safety information, proper storage conditions and documents AccuStandard as the manufacturer.

Part Two duplicates required information for labeling transfer vial(s) with correct information.

* Includes the most common solvents:

Methylene chloride, Methanol and Acetone



Method 1668 Congener Set - 209 Chlorinated Biphenyl Congeners by HRGC/HRMS

PCB Congener Mix #1

M-1668A-1-0,01X

At stated conc. in Isooctane

3-Chlorobiphenyl	(2.5 µg/mL)
2,6-Dichlorobiphenyl	(2.5 µg/mL)
2,5-Dichlorobiphenyl	(2.5 µg/mL)
2,3'-Dichlorobiphenyl	(2.5 µg/mL)
2,4'-Dichlorobiphenyl	(2.5 µg/mL)
3,5-Dichlorobiphenyl	(2.5 µg/mL)
3,3'-Dichlorobiphenyl	(2.5 µg/mL)
2,4,6-Trichlorobiphenyl	(2.5 µg/mL)
2,3',6-Trichlorobiphenyl	(2.5 µg/mL)
2,4',6-Trichlorobiphenyl	(2.5 µg/mL)
2',3,5-Trichlorobiphenyl	(2.5 µg/mL)
2,3',5-Trichlorobiphenyl	(2.5 µg/mL)
2,4',5-Trichlorobiphenyl	(2.5 µg/mL)
2',3,4-Trichlorobiphenyl	(2.5 µg/mL)
3,3',5-Trichlorobiphenyl	(2.5 µg/mL)
3,4,5-Trichlorobiphenyl	(2.5 µg/mL)
3,3',4-Trichlorobiphenyl	(2.5 µg/mL)
2,2',4,6-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',3,6-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',5,5'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',4,5'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,4,4',6-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',3,4-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3',5,5'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,3',5-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,4',5-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3',4,4'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3',4,5'-Tetrachlorobiphenyl	(5.0 µg/mL)
3,3',4,5-Tetrachlorobiphenyl	(5.0 µg/mL)
3,4,4',5-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',3,6,6'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',4,5',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,5',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,6'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,5,5'-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,3',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',5-Pentachlorobiphenyl	(5.0 µg/mL)
2,3',4,4',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,5'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4-Pentachlorobiphenyl	(5.0 µg/mL)

2',3',4,5,5'-Pentachlorobiphenyl	(5.0 µg/mL)
2',3,4,5,5'-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,5-Pentachlorobiphenyl	(5.0 µg/mL)
2',3,3',4,5-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,4'-Pentachlorobiphenyl	(5.0 µg/mL)
3,3',4,5,5'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,5,6,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',6,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4',5,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,5,5',6-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4',5,6-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,5,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,5,6-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',5,5'-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,5',6-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',4,4',5,5'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,5'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,5-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,4,4',4,5,6-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,5,5'-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,4',5-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',5,6,6'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,6,6'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',5,5',6-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,5',6-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4',5',6-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,5,6-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,4',6-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,5,5'-Heptachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,4',5',6-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,4',5-Heptachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,4',5,6-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,4',5,6-Octachlorobiphenyl	(7.5 µg/mL)
2,2',3,4,4',5,6,6'-Octachlorobiphenyl	(7.5 µg/mL)
2,2',3,3',4,5,6,6'-Octachlorobiphenyl	(7.5 µg/mL)
2,2',3,3',4,5,5',6-Octachlorobiphenyl	(7.5 µg/mL)
2,2',3,3',4,4',5',6-Octachlorobiphenyl	(7.5 µg/mL)
2,2',3,3',4,4',5,6-Octachlorobiphenyl	(7.5 µg/mL)
2,2',3,3',4,4',5,5'-Octachlorobiphenyl	(7.5 µg/mL)
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl	(7.5 µg/mL)

PCB Congener Mix #2

M-1668A-2-0.01X

At stated conc. in Isooctane

2,4-Dichlorobiphenyl	(2.5 µg/mL)
2,3-Dichlorobiphenyl	(2.5 µg/mL)
2,3-Dichlorobiphenyl	(2.5 µg/mL)
2,2',5-Trichlorobiphenyl	(2.5 µg/mL)
2,3,6-Trichlorobiphenyl	(2.5 µg/mL)
2,3,5-Trichlorobiphenyl	(2.5 µg/mL)
2,4,4'-Trichlorobiphenyl	(2.5 µg/mL)
2,3,4'-Trichlorobiphenyl	(2.5 µg/mL)
3,4',5-Trichlorobiphenyl	(2.5 µg/mL)
2,2',5,6'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',4,6'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3',5',6-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',4,5-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,4,6-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3',4',6-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3',4,5'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,4,5-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,3',4-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,4,4'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',3,5',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',4,4',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,4',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,3',4,5',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,4',5-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',4,4',5-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,4',5-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,4',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,4',5,6-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,3',5,5'-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,5'-Pentachlorobiphenyl	(5.0 µg/mL)
2,3',4,4',5-Pentachlorobiphenyl	(5.0 µg/mL)
2,2,3,4,4',5-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,4',6,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,6,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',5,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4',5',6-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4',6-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,5',6-Hexachlorobiphenyl	(5.0 µg/mL)
2,3',4,4',5',6-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4',5-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,5',6-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,4'-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,3',4',4,5'-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,4',5'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4',6,6'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,5,6,6'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,4',5,6,6'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4',5,6-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,4',6,6'-Octachlorobiphenyl	(7.5 µg/mL)
2,2',3,3',4,4',5,6'-Octachlorobiphenyl	(7.5 µg/mL)
2,2',3,4,4',4',5,5',6-Octachlorobiphenyl	(7.5 µg/mL)

PCB Congener Mix #3

M-1668A-3-0.01X

At stated conc. in Isooctane

1 x 1 mL

29 comps.

3,4'-Dichlorobiphenyl	(2.5 µg/mL)
2,2',4'-Trichlorobiphenyl	(2.5 µg/mL)
2,4,5-Trichlorobiphenyl	(2.5 µg/mL)
2,3,3'-Trichlorobiphenyl	(2.5 µg/mL)
2,2',3,6'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,5,6-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,3',6-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',3,3'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3',4,5-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,4,5-Tetrachlorobiphenyl	(5.0 µg/mL)
3,3',5,5'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',3,5,6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',4,5,5'-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,3',5,6-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,5-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,4,5,6-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,3',4',5-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',4,4',5,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4',5,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4',6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4',5,5',6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,5,5',6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,3',4',5',6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,3',4,4',6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4',5',6'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,5,6'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,5,6-Heptachlorobiphenyl	(5.0 µg/mL)
2,3,3',4',5',5',6'-Heptachlorobiphenyl	(5.0 µg/mL)

Congener specific determination of all 209 PCB congeners for calibration on a SPB-Octyl capillary column.

M-1668A-0.01X-SET

5 x 1 mL (M-1668A-1-0.01X, M-1668A-2-0.01X,
M-1668A-3-0.01X, M-1668A-4-0.01X,
M-1668A-5-0.01X)

All 209 Individual PCB Congeners are listed in PCB Section.

Method 1668 (Continued) Congener Set - 209 Chlorinated Biphenyl Congeners by HRGC/HRMS

PCB Congener Mix #4

M-1668A-4-0.01X

At stated conc. in Isooctane

1 x 1 mL

15 comps.

2,3,4-Trichlorobiphenyl	(2.5 µg/mL)
2,3,4-Trichlorobiphenyl	(2.5 µg/mL)
2,3,4,6-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',4,4'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',3,4'-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3,4,6-Tetrachlorobiphenyl	(5.0 µg/mL)
2,3',4',5-Tetrachlorobiphenyl	(5.0 µg/mL)
2,2',4,5,6'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3',4,5-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,4,4',6-Pentachlorobiphenyl	(5.0 µg/mL)
2,3,4,4',5-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',5,6-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,3',4,6-Hexachlorobiphenyl	(5.0 µg/mL)
2,3,3',4',5,6-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3,4,4',5,5'-Heptachlorobiphenyl	(5.0 µg/mL)

PCB Congener Mix #5

M-1668A-5-0.01X

At stated conc. in Isooctane

1 x 1 mL

28 comps.

2-Chlorobiphenyl	(2.5 µg/mL)	2,2',3',4,6-Pentachlorobiphenyl	(5.0 µg/mL)
4-Chlorobiphenyl	(2.5 µg/mL)	2',3,4,5,6'-Pentachlorobiphenyl	(5.0 µg/mL)
2,2'-Dichlorobiphenyl	(2.5 µg/mL)	2,3,3',4',6-Pentachlorobiphenyl	(5.0 µg/mL)
4,4'-Dichlorobiphenyl	(2.5 µg/mL)	3,3',4,4',5-Pentachlorobiphenyl	(5.0 µg/mL)
2,2',6-Trichlorobiphenyl	(2.5 µg/mL)	2,2',4,4',6,6'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',3-Trichlorobiphenyl	(2.5 µg/mL)	2,2',3,4,4',5'-Hexachlorobiphenyl	(5.0 µg/mL)
3,4,4'-Trichlorobiphenyl	(2.5 µg/mL)	3,3',4,4',5,5'-Hexachlorobiphenyl	(5.0 µg/mL)
2,2',6,6'-Tetrachlorobiphenyl	(5.0 µg/mL)	2,2',3,4',5,6,6'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,5-Tetrachlorobiphenyl	(5.0 µg/mL)	2,3,3',4,4',5,5'-Heptachlorobiphenyl	(5.0 µg/mL)
2,2',3,5'-Tetrachlorobiphenyl	(5.0 µg/mL)	2,2',3,3',5,5',6,6'-Octachlorobiphenyl	(7.5 µg/mL)
2,4,4',5-Tetrachlorobiphenyl	(5.0 µg/mL)	2,3,3',4,4',5,5',6-Octachlorobiphenyl	(7.5 µg/mL)
2,3,3',4'-Tetrachlorobiphenyl	(5.0 µg/mL)	2,2',3,3',4,5,5',6,6'-Nonachlorobiphenyl	(7.5 µg/mL)
3,3',4,4'-Tetrachlorobiphenyl	(5.0 µg/mL)	2,2',3,3',4,4',5,5',6,6'-Nonachlorobiphenyl	(7.5 µg/mL)
2,2',4,6,6'-Pentachlorobiphenyl	(5.0 µg/mL)	Decachlorobiphenyl	(7.5 µg/mL)

Method 1668 Level of Chlorination Calibration / Spike

Native PCB Calibration Mix

M-1668A-NAT

At stated conc. in Isooctane

1 x 1 mL

19 comps.

4-Chlorobiphenyl	(5 µg/mL)
4,4'-Dichlorobiphenyl	(5 µg/mL)
2,4,4'-Trichlorobiphenyl	(5 µg/mL)
3,3',4,4'-Tetrachlorobiphenyl	(1 µg/mL)
2,3,3',4,4'-Pentachlorobiphenyl	(5 µg/mL)
2,3,4,4',5-Pentachlorobiphenyl	(5 µg/mL)
2,3',4,4',5-Pentachlorobiphenyl	(5 µg/mL)
2',3,4,4',5-Pentachlorobiphenyl	(5 µg/mL)
3,3',4,4',5-Pentachlorobiphenyl	(5 µg/mL)
2,3,3',4,4',5-Hexachlorobiphenyl	(10 µg/mL)
2,3,3',4,4',5'-Hexachlorobiphenyl	(10 µg/mL)
2,3',4,4',5,5'-Hexachlorobiphenyl	(10 µg/mL)
3,3',4,4',5,5'-Hexachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5-Heptachlorobiphenyl	(10 µg/mL)
2,2',3,4,4',5,5'-Heptachlorobiphenyl	(10 µg/mL)
2,3,3',4,4',5,5'-Heptachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5,5'-Octachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	(20 µg/mL)

Method 1668A - Combined Congener Standard

M-1668A-C-NT-LOC-WD

20 µg/mL each in Isooctane

1 x 1 mL

33 comps.

2-Chlorobiphenyl	2,2',4,4',6,6'-Hexachlorobiphenyl
4-Chlorobiphenyl	2,3,3',4,4',5-Hexachlorobiphenyl
2,2'-Dichlorobiphenyl	2,3,3',4,4',5'-Hexachlorobiphenyl
4,4'-Dichlorobiphenyl	2,3',4,4',5,5'-Hexachlorobiphenyl
2,2',6-Trichlorobiphenyl	3,3',4,4',5,5'-Hexachlorobiphenyl
2,3,5-Trichlorobiphenyl	2,2',3,3',4,4',5-Heptachlorobiphenyl
2',3,5-Trichlorobiphenyl	2,2',3,4,4',5,5'-Heptachlorobiphenyl
3,4,4'-Trichlorobiphenyl	2,2',3,4,4',5,6'-Heptachlorobiphenyl
2,2',6,6'-Tetrachlorobiphenyl	2,2',3,4',5,5',6-Heptachlorobiphenyl
3,3',4,4'-Tetrachlorobiphenyl	2,2',3,4',5,6,6'-Heptachlorobiphenyl
3,4,4',5-Tetrachlorobiphenyl	2,3,3',4,4',5,5'-Heptachlorobiphenyl
2,2',4,6,6'-Pentachlorobiphenyl	2,2',3,3',5,5',6,6'-Octachlorobiphenyl
2,3,3',4,4'-Pentachlorobiphenyl	2,3,3',4,4',5,5',6-Octachlorobiphenyl
2,3,4,4',5-Pentachlorobiphenyl	2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl
2',3,4,4',5-Pentachlorobiphenyl	2,2',3,3',4,4',5,5',6,6'-Nonachlorobiphenyl
2',3,4,4',5-Pentachlorobiphenyl	2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
3,3',4,4',5-Pentachlorobiphenyl	

PAR PCB Spike Mix

M-1668A-PAR

At stated conc. in Isooctane

1 x 1 mL

19 comps.

4-Chlorobiphenyl	(10 µg/mL)
4,4'-Dichlorobiphenyl	(10 µg/mL)
2,4,4'-Trichlorobiphenyl	(10 µg/mL)
3,3',4,4'-Tetrachlorobiphenyl	(0.2 µg/mL)
2,3,3',4,4',5-Pentachlorobiphenyl	(10 µg/mL)
2,3,4,4',5-Pentachlorobiphenyl	(10 µg/mL)
2,3',4,4',5-Pentachlorobiphenyl	(10 µg/mL)
2',3,4,4',5-Pentachlorobiphenyl	(10 µg/mL)
3,3',4,4',5-Pentachlorobiphenyl	(1 µg/mL)
2,3,3',4,4',5-Hexachlorobiphenyl	(10 µg/mL)
2,3,3',4,4',5'-Hexachlorobiphenyl	(10 µg/mL)
2,3',4,4',5,5'-Hexachlorobiphenyl	(10 µg/mL)
3,3',4,4',5,5'-Hexachlorobiphenyl	(2 µg/mL)
2,2',3,3',4,4',5-Heptachlorobiphenyl	(2 µg/mL)
2,2',3,4,4',5,5'-Heptachlorobiphenyl	(10 µg/mL)
2,3,3',4,4',5,5'-Heptachlorobiphenyl	(2 µg/mL)
2,2',3,3',4,4',5,5'-Octachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	(10 µg/mL)
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	(20 µg/mL)

Method 1668A - QC Standard

M-1668A-QC

M-1668A-QC-PAK

At stated conc. in Isooctane

SAVE

1 x 1 mL

5 x 1 mL

13 comps.

3,3',4,4'-Tetrachlorobiphenyl	(0.2 µg/mL)
2,3,3',4,4'-Pentachlorobiphenyl	(10 µg/mL)
2,3,4,4',5-Pentachlorobiphenyl	(10 µg/mL)
2,3',4,4',5-Pentachlorobiphenyl	(10 µg/mL)
2',3,4,4',5-Pentachlorobiphenyl	(10 µg/mL)
3,3',4,4',5-Pentachlorobiphenyl	(1 µg/mL)
2,3,3',4,4',5-Hexachlorobiphenyl	(10 µg/mL)
2,3,3',4,4',5'-Hexachlorobiphenyl	(10 µg/mL)
2,3',4,4',5,5'-Hexachlorobiphenyl	(10 µg/mL)
3,3',4,4',5,5'-Hexachlorobiphenyl	(2 µg/mL)
2,2',3,3',4,4',5-Heptachlorobiphenyl	(2 µg/mL)
2,2',3,4,4',5,5'-Heptachlorobiphenyl	(10 µg/mL)
2,3,3',4,4',5,5'-Heptachlorobiphenyl	(2 µg/mL)

Level of Chlorination Calibration / Spike Set

M-1668A-LOC-SET

2 x 1 mL (M-1668A-NAT, M-1668A-PAR)

Method 1671 VOCs Specific to PMI by GC/FID**PMI Internal Standard**

M-1671A-IS

M-1671A-IS-PAK

1.0 mg/mL in Water

SAVE

1 x 1 mL

5 x 1 mL

Tetrahydrofuran

Custom Formulations

AccuStandard can obtain PEG with different mixtures of oligomers having molecular weights centered around 200, 300, 400, 550, 1000, 1450, 3350, 8000, 10,000 ca.

Method 1673 Polyethylene glycol-600 by Derivative & HPLC**Poly(ethylene glycol)-600**

M-1673

M-1673-PAK

2.5 mg/mL in Tetrahydrofuran

SAVE

1 x 1 mL

5 x 1 mL

Polyethylene glycol-600

Surrogate Standard

M-1673-SS

M-1673-SS-PAK

1.0 mg/mL in Tetrahydrofuran

SAVE

1 x 1 mL

5 x 1 mL

Diethylene glycol monohexyl ether

Derivatization Reagent

M-1673-DERV-5ML

10 mg/mL in Tetrahydrofuran

1 x 5 mL

3,5-Dinitrobenzyl chloride



Standard Mixtures for EPA Method 8000 Series

For Solid Waste



Background Information

The analytical methods used to identify and quantify organic compounds in solid waste are provided in US EPA SW-846, also known as the 8000 series methods.

These methods were developed in response to environmental problem areas such as Love Canal, N.Y. and Times Beach, MO. A historical perspective of the evolution of this series includes the Resource and Conservation Recovery Act (RCRA), which was amended by the Hazardous and Solid Waste Act (HSWA). HSWA also addressed previously exempted underground storage tanks containing petroleum and some hazardous substances.

The 8000 Series product line contains standards used in the proposed and promulgated methods for the identification and quantification of organic compounds on the EPA's Appendix VIII and Appendix IX lists in ground water, waste water, and solids at hazardous waste treatment, storage, and disposal sites. An additional method Toxicity Characteristic Leaching Procedure (TCLP) Method 1311 is used with 8000 series methods to estimate the toxicity of solid waste materials under the leaching conditions found in a landfill.

The organic compounds listed in these methods include volatile organic compounds (VOCs), pesticides, synthetic organic compounds (SOCs), and disinfection by-products.

Instrumentation

Analytical techniques used in identification and quantification include gas chromatography with selective detectors (AED, PID, ELCD, ECD, FID, FTIR, NPD, FPD, TEA, TCD) gas chromatography /mass spectrometry, and high performance liquid chromatography.

Comprehensive

Complete analysis of target compounds by these 8000 Series Methods can be accomplished using the series of standards formulated by AccuStandard for each method along with the required internal and surrogate standards. Formulations for 8000 series methods have been developed as easy-to-use large core mixes containing target compounds and as high concentration sub mixes for combination with other formulations to meet laboratory specific analyte detection requirements.

Match frequently requested products

Alternate Source

ASL products can be used as an independent second source

Methods 8015A, 8020A, 8040A, 8080A, 8270

*Thousands of Standards,
just a click away*



AccuStandard.com

Method #	Method Descriptions	Pages
8000, APP IX	Appendix IX Individual Analytes	196-197
8000, APP IX	Appendix IX Mixtures	197-198
8000	Volatile & Semi-Volatile Mixtures	198
8000 Series	Volatile Internal/Surrogate Standards	199
8010, 8010A/B	Halogenated Volatiles (ELCD)	200-201
8011	EDB & DBCP (GC/MS)	201
8015A, 8015B	Non Halogenated Organics (FID)	202
8015B/5031	Azeotropic Distillation (GC/FID)	202
8020	Aromatic Volatiles (PID)	202
8021B	Halogenated Volatiles (PID/ELCD)	203-204
8030A	Acrolein & Acrylonitrile (FID)	204
8031	Acrylonitrile (NPD)	204
8032, 8032A	Acrylamide (ECD)	204
8033	Acetonitrile (NPD)	204
8040, 8040A	Phenols, PFB Derivatives (ECD)	205
8041	Phenols as PFB Derivatives (FID/ECD)	206
8060	Phthalate Esters (ECD)	206
8061A	Phthalate Esters (ECD)	206
8070A	Nitrosamines (NPD/TEA)	206
8080A	Organochlorine Pesticides & PCBs	207
8081/8081A/B	Organochlorine Pesticides (ECD)	207-211
8082	PCBs (ECD or ELCD)	212
8085	Pesticides (AED)	213-214
8090	Nitroaromatics & Isophorone (TCD/FID)	214
8091	Nitroaromatics & Cyclic Ketones (ECD/NPD)	214
8095	Explosives (ECD)	215
8100	Polynuclear Aromatic Hydrocarbons (FID)	215
8110	Haloethers (FID)	215
8111	Haloethers (GC)	216
8120, 8120A	Chlorinated Hydrocarbons (ECD)	216
8121	Chlorinated Hydrocarbons (ECD)	216
8131	Aniline & Derivatives (NPD/AFD/TSD)	216
8140	Organophosphorous Pesticides (NPD/ELCD/FPD)	217
8141A	Additions to Method 8140 (GC/NPD)	217
8150A, 8150B	Chlorinated Herbicides (ECD)	218-219
8151/8151A	Chlorinated Herbicides (ECD)	220
8240, 8240A	Volatiles (GC/MS)	220
8240 & 8260	Combined Method Volatile Organics (GC/MS)	221, 224
8260B	Volatiles (GC/MS)	222-223
8270, 8270C/D	Semi-Volatile (GC/MS) Alternate Source Line (ASL)	225-234
8272	PAHs (GC/MS)	235
8275A	Semi-Volatiles (Thermal Chromatography)	235
8280A	Dioxins & Furans (HRGC/LRMS)	235
8310	Polynuclear Aromatic Hydrocarbons (HPLC)	236
8315, 8315A	Ketones/Aldehydes (HPLC)	237
8316	Acrolein, Acrylamide, Acrylonitrile (HPLC)	237
8318	N-Methylcarbamates (HPLC)	237
8321	Solvent Extractable Non-Volatiles (HPLC/TSP/MS)	238
8323	Organometallic Tin Analysis (Ion Trap MS)	238
8325	Benzidine & Nitrogen Pesticides (HPLC/MS)	238
8330	Explosives (HPLC)	239-240
8410	Semi-Volatiles (FTIR)	240
8430	bis(2-Chloroethyl) ether & Hydrolysis Products	240
8440	Total Petroleum Hydrocarbons (IR)	240



EPA Method 8000 Series

Appendix IX Compounds

AccuStandard has assembled the compounds appearing below to aid the analyst in identifying all the contaminants the EPA has regulated for groundwater monitoring. This list (214 compounds), commonly called the Appendix IX list, was first published in July 1987. Federal Register Vol. 52, No. 131.

The entire list of compounds can be purchased as a complete set as:

APP-9-SET

214 x 1 mL

All solutions are at 100 µg/mL in 1 mL

Appendix IX Compounds

Compound	CAS No.	Solv.	Cat. No.	Compound	CAS No.	Solv.	Cat. No.
Acenaphthene	83-32-9	MeOH	APP-9-001	1,2-Dichloroethane	107-06-2	MeOH	APP-9-071
Acenaphthylene	208-96-8	MeOH	APP-9-002	1,1-Dichloroethylene	75-34-4	MeOH	APP-9-072
Acetone	67-64-1	MeOH	APP-9-003	<i>trans</i> -1,2-Dichloroethylene	156-60-5	MeOH	APP-9-073
Acetonitrile	75-05-8	MeOH	APP-9-005	Dichloromethane	75-09-2	MeOH	APP-9-074
Acetophenone	98-86-2	CH ₂ Cl ₂	APP-9-004	2,4-Dichlorophenol	120-83-2	MeOH	APP-9-075
2-Acetylamino fluorene	53-96-3	CH ₂ Cl ₂	APP-9-006	2,6-Dichlorophenol	87-65-0	CH ₂ Cl ₂	APP-9-076
Acrolein	107-02-8	M:W	APP-9-007	1,2-Dichloropropane	78-87-5	MeOH	APP-9-077
Acrylonitrile	107-13-1	MeOH	APP-9-008	<i>cis</i> -1,3-Dichloropropene	10061-01-5	MeOH	APP-9-078
Aldrin	309-00-2	MeOH	APP-9-009	<i>trans</i> -1,3-Dichloropropene	10061-02-6	MeOH	APP-9-079
Allyl chloride	107-05-1	MeOH	APP-9-010	Dieldrin	60-57-1	MeOH	APP-9-080
4-Aminobiphenyl	92-67-1	CH ₂ Cl ₂	APP-9-011	Diethyl phthalate	84-66-2	MeOH	APP-9-081
Aniline	62-53-3	MeOH	APP-9-012	Dimethoate	60-51-5	MeOH	APP-9-082
Anthracene	120-12-7	MeOH	APP-9-013	<i>p</i> -(Dimethylamino)azobenzene	60-11-7	CH ₂ Cl ₂	APP-9-083
Aramite	140-57-8	MeOH	APP-9-014	7,12-Dimethylbenz[a]anthracene	57-97-6	CH ₂ Cl ₂	APP-9-084
Benz[a]anthracene	56-55-3	MeOH	APP-9-016	3,3'-Dimethylbenzidine	119-93-7	CH ₂ Cl ₂	APP-9-085
Benzene	71-43-2	MeOH	APP-9-015	<i>a,a</i> -Dimethylphenethylamine	122-09-8	CH ₂ Cl ₂	APP-9-086
Benzo[b]fluoranthene	205-99-2	MeOH	APP-9-017	2,4-Dimethylphenol	105-67-9	MeOH	APP-9-087
Benzo[k]fluoranthene	2070-08-9	MeOH	APP-9-018	Dimethyl phthalate	131-11-3	MeOH	APP-9-088
Benzo[g,h,i]perylene	191-24-2	CH ₂ Cl ₂	APP-9-019	<i>m</i> -Dinitrobenzene	99-65-0	CH ₂ Cl ₂	APP-9-089
Benzo[a]pyrene	50-32-8	MeOH	APP-9-020	4,6-Dinitro- <i>o</i> -cresol	534-52-1	MeOH	APP-9-090
Benzyl alcohol	100-51-6	MeOH	APP-9-021	2,4-Dinitrophenol	51-28-5	MeOH	APP-9-091
α-BHC	319-84-6	MeOH	APP-9-022	2,4-Dinitrotoluene	121-14-2	MeOH	APP-9-092
β-BHC	319-85-7	MeOH	APP-9-023	2,6-Dinitrotoluene	606-20-2	MeOH	APP-9-093
δ-BHC	319-86-8	MeOH	APP-9-024	Dinoseb	88-85-7	MeOH	APP-9-094
γ-BHC (Lindane)	58-89-9	MeOH	APP-9-025	Di- <i>n</i> -octyl phthalate	117-84-0	MeOH	APP-9-095
Bromodichloromethane	75-27-4	MeOH	APP-9-030	1,4-Dioxane	123-91-1	MeOH	APP-9-096
Bromoform	75-25-2	MeOH	APP-9-031	Diphenylamine	122-39-4	CH ₂ Cl ₂	APP-9-097
Bromomethane	74-83-9	MeOH	APP-9-032	Disulfoton	298-04-4	MeOH	APP-9-098
4-Bromophenyl phenyl ether	101-55-3	MeOH	APP-9-033	Endosulfan I	959-98-8	MeOH	APP-9-099
Butyl benzyl phthalate	85-68-7	MeOH	APP-9-034	Endosulfan II	33213-65-9	MeOH	APP-9-100
Carbon disulfide	75-15-0	MeOH	APP-9-035	Endosulfan sulfate	1031-07-8	MeOH	APP-9-101
Carbon tetrachloride	56-23-5	MeOH	APP-9-036	Endrin	72-20-8	MeOH	APP-9-102
Chlordane	57-74-9	MeOH	APP-9-037	Endrin aldehyde	7421-93-4	MeOH	APP-9-103
<i>p</i> -Chloroaniline	106-47-8	MeOH	APP-9-038	Ethylbenzene	100-41-4	MeOH	APP-9-104
Chlorobenzene	108-90-7	MeOH	APP-9-039	bis(2-Ethylhexyl)phthalate	117-81-7	MeOH	APP-9-029
Chlorobenzilate	510-15-6	CH ₂ Cl ₂	APP-9-040	Ethyl methacrylate	97-63-2	MeOH	APP-9-105
<i>p</i> -Chloro- <i>m</i> -cresol	59-50-7	MeOH	APP-9-041	Ethylmethanesulfonate	62-50-0	CH ₂ Cl ₂	APP-9-106
Chloroethane	75-00-3	MeOH	APP-9-042	Famphur	52-85-7	MeOH	APP-9-107
bis(2-Chloroethoxy)methane	111-91-1	CH ₂ Cl ₂	APP-9-026	Fluoranthene	206-44-0	MeOH	APP-9-108
bis(2-Chloroethyl) ether	111-44-4	MeOH	APP-9-027	Fluorene	86-73-7	MeOH	APP-9-109
Chloroform	67-66-3	MeOH	APP-9-043	Heptachlor	76-44-8	MeOH	APP-9-110
bis(2-Chloro-1-methylethyl) ether (2,2-Dichlorodiisopropyl ether)	108-60-1	CH ₂ Cl ₂	APP-9-028	Heptachlor epoxide [Isomer B]	1024-57-3	MeOH	APP-9-111
Chloromethane	74-87-3	MeOH	APP-9-044	Hexachlorobenzene	118-74-1	MeOH	APP-9-112
2-Chloronaphthalene	91-58-7	MeOH	APP-9-045	Hexachlorobutadiene	87-68-3	MeOH	APP-9-113
2-Chlorophenol	95-57-8	MeOH	APP-9-046	Hexachlorocyclopentadiene	77-47-4	MeOH	APP-9-114
4-Chlorophenyl phenyl ether	7005-72-3	MeOH	APP-9-047	Hexachloroethane	67-72-1	MeOH	APP-9-115
Chloroprene (Xylene-Free)	126-99-8	MeOH	APP-9-048-R1	Hexachlorophene	70-30-4	MeOH	APP-9-116
Chrysene	218-01-9	MeOH	APP-9-049	Hexachloropropene	1888-71-7	MeOH	APP-9-117
<i>m</i> -Cresol	108-39-4	CH ₂ Cl ₂	APP-9-050	2-Hexanone	591-78-6	MeOH	APP-9-118
<i>o</i> -Cresol	95-48-7	CH ₂ Cl ₂	APP-9-051	Indeno[1,2,3- <i>cd</i>]pyrene	193-39-5	MeOH	APP-9-119
<i>p</i> -Cresol	106-44-5	CH ₂ Cl ₂	APP-9-052	Isobutyl alcohol	78-83-1	MeOH	APP-9-120
2,4-D	94-75-7	MeOH	APP-9-053	Isodrin	465-73-6	MeOH	APP-9-121
4,4'-DDD	72-54-8	MeOH	APP-9-054	Isophorone	78-59-1	MeOH	APP-9-122
4,4'-DDE	72-55-9	MeOH	APP-9-055	Isosafrole	120-58-1	CH ₂ Cl ₂	APP-9-123
4,4'-DDT	50-29-3	MeOH	APP-9-056	Kepone	143-50-0	MeOH	APP-9-124
Diallate	2303-16-4	MeOH	APP-9-057	Methacrylonitrile	126-98-7	MeOH	APP-9-125
Dibenz[a,h]anthracene	53-70-3	MeOH	APP-9-058	Methapyrilene	91-80-5	CH ₂ Cl ₂	APP-9-126
Dibenzofuran	132-64-9	MeOH	APP-9-059	Methoxychlor	72-43-5	MeOH	APP-9-127
Dibromochloromethane	124-48-1	MeOH	APP-9-060	3-Methylcholanthrene	56-49-5	CH ₂ Cl ₂	APP-9-128
1,2-Dibromo-3-chloropropane	96-12-8	MeOH	APP-9-061	Methyl ethyl ketone; MEK	78-93-3	MeOH	APP-9-129
Dibromomethane	74-95-3	MeOH	APP-9-062	Methyl iodide: Iodomethane	74-88-4	MeOH	APP-9-130
1,2-Dibromoethane, EDB	107-06-2	MeOH	APP-9-214	Methyl methacrylate	80-62-6	MeOH	APP-9-131
Di- <i>n</i> -butyl phthalate	84-74-2	MeOH	APP-9-063	Methyl methanesulfonate	66-27-3	CH ₂ Cl ₂	APP-9-132
<i>o</i> -Dichlorobenzene	95-50-1	MeOH	APP-9-064	2-Methylnaphthalene	91-57-6	CH ₂ Cl ₂	APP-9-133
<i>m</i> -Dichlorobenzene	541-73-1	MeOH	APP-9-065	Methyl parathion	298-00-0	MeOH	APP-9-134
<i>p</i> -Dichlorobenzene	106-46-7	MeOH	APP-9-066	4-Methyl-2-pentanone (<i>MIBK</i>)	108-10-1	MeOH	APP-9-135
3,3'-Dichlorobenzidine	91-94-1	MeOH	APP-9-067	Naphthalene	91-20-3	CH ₂ Cl ₂	APP-9-136
<i>trans</i> -1,4-Dichloro-2-butene	110-57-6	MeOH	APP-9-068	1,4-Naphthoquinone	130-15-4	CH ₂ Cl ₂	APP-9-137
Dichlorodifluoromethane	75-71-8	MeOH	APP-9-069	1-Naphthylamine	134-32-7	CH ₂ Cl ₂	APP-9-138
1,1-Dichloroethane	75-34-3	MeOH	APP-9-070	2-Naphthylamine	91-59-8	CH ₂ Cl ₂	APP-9-139
				<i>o</i> -Nitroaniline	88-74-4	CH ₂ Cl ₂	APP-9-140

* ColdPAK required to maintain integrity of product.

EPA Method 8000 Series

Appendix IX Compounds & Mixtures



Custom Appendix IX formulations are available.
Please use our Custom Quotation Request for any
custom mixture you may need.

The entire list of compounds can
be purchased as a complete set
APP-9-SET 214 x 1 mL

Appendix IX

Appendix IX Compounds All solutions are in 100 µg/mL in 1 mL

Compound	CAS No.	Solv.	Cat. No.	Compound	CAS No.	Solv.	Cat. No.
<i>m</i> -Nitroaniline	99-09-2	CH ₂ Cl ₂	APP-9-141	Pentachlorobenzene	608-93-5	MeOH	APP-9-173
<i>p</i> -Nitroaniline	100-01-6	CH ₂ Cl ₂	APP-9-142	Pentachloroethane	76-01-7	MeOH	APP-9-174
Nitrobenzene	98-95-3	MeOH	APP-9-143	Pentachloronitrobenzene	82-68-8	MeOH	APP-9-175
<i>o</i> -Nitrophenol	88-75-5	MeOH	APP-9-144	Pentachlorophenol	87-86-5	MeOH	APP-9-176
<i>p</i> -Nitrophenol	100-02-7	MeOH	APP-9-145	Phenacetin	62-44-2	CH ₂ Cl ₂	APP-9-177
4-Nitroquinoline-1-oxide	56-57-5	CH ₂ Cl ₂	APP-9-146	Phenanthrene	85-01-8	MeOH	APP-9-178
N-Nitrosodi- <i>n</i> -butylamine	924-16-3	CH ₂ Cl ₂	APP-9-147	Phenol	108-95-2	CH ₂ Cl ₂	APP-9-179
N-Nitrosodiethylamine	55-18-5	CH ₂ Cl ₂	APP-9-148	<i>p</i> -Phenylenediamine	106-50-3	MeOH	APP-9-180
N-Nitrosodimethylamine	62-75-9	CH ₂ Cl ₂	APP-9-149	Phorate	298-02-2	MeOH	APP-9-181
N-Nitrosodiphenylamine	86-30-6	CH ₂ Cl ₂	APP-9-150	2-Picoline	109-06-8	MeOH	APP-9-182
N-Nitrosodipropylamine	621-64-7	CH ₂ Cl ₂	APP-9-151	Pronamide	23950-58-5	MeOH	APP-9-183
N-Nitrosomethylethylamine	10595-95-6	CH ₂ Cl ₂	APP-9-152	Propionitrile	107-12-0	MeOH	APP-9-184
N-Nitrosomorpholine	59-89-2	CH ₂ Cl ₂	APP-9-153	Pyrene	129-00-0	MeOH	APP-9-185
N-Nitrosopiperidine	100-75-4	CH ₂ Cl ₂	APP-9-154	Pyridine	110-86-1	MeOH	APP-9-186-M
N-Nitrosopyrrolidine	930-55-2	CH ₂ Cl ₂	APP-9-155	Safrole	94-59-7	MeOH	APP-9-187
5-Nitro- <i>o</i> -toluidine	99-55-8	CH ₂ Cl ₂	APP-9-156	Silvex (2,4,5-TP)	93-72-1	MeOH	APP-9-188
Parathion	56-38-2	MeOH	APP-9-157	Styrene	100-42-5	MeOH	APP-9-189
Polychlorinated biphenyls:				2,4,5-Trichlorophenoxy acetic acid	93-76-5	MeOH	APP-9-190
Aroclor® 1016	12674-11-2	MeOH	APP-9-158	1,2,4,5-Tetrachlorobenzene	95-94-3	MeOH	APP-9-191
Aroclor 1221	11104-28-2	MeOH	APP-9-159	1,1,1,2-Tetrachloroethane	630-20-6	MeOH	APP-9-192
Aroclor 1232	11141-16-5	MeOH	APP-9-160	1,1,2,2-Tetrachloroethane	79-34-5	MeOH	APP-9-193
Aroclor 1242	53469-21-9	MeOH	APP-9-161	Tetrachloroethylene	127-18-4	MeOH	APP-9-194
Aroclor 1248	12672-29-6	MeOH	APP-9-162	2,3,4,6-Tetrachlorophenol	58-90-2	MeOH	APP-9-195
Aroclor 1254	11097-69-1	MeOH	APP-9-163	Tetraethyl dithiopyrophosphate (Sulfotep)	3689-24-5	MeOH	APP-9-196
Aroclor 1260	11096-82-5	MeOH	APP-9-164	Thionazin	297-97-2	MeOH	APP-9-197
Aroclor 1262	37324-23-5	MeOH	APP-9-165	Toluene	108-88-3	MeOH	APP-9-198
Aroclor 1268	11100-14-4	MeOH	APP-9-166	<i>o</i> -Toluidine	95-53-4	MeOH	APP-9-199
	0.5 mg/mL in	MeOH	APP-9-166-5X	Toxaphene	8001-35-2	MeOH	APP-9-200
Dioxins:				1,2,4-Trichlorobenzene	120-82-1	MeOH	APP-9-201
1,2,3,4,7,8-HCDD (5 µg/mL)	39227-28-6	Toluene	APP-9-169	1,1,1-Trichloroethane	71-55-6	MeOH	APP-9-202
1,2,3,7,8-PCCD (5 µg/mL)	40321-76-4	Toluene	APP-9-168	1,1,2-Trichloroethane	79-00-5	MeOH	APP-9-203
2,3,7,8-TCDD (5 µg/mL)	1746-01-6	Toluene	APP-9-167	Trichloroethylene	79-01-6	MeOH	APP-9-204
Polychlorinated dibenzofurans:				Trichlorofluoromethane	75-69-4	MeOH	APP-9-205
1,2,3,4,7,8-HCDF (5 µg/mL)	55684-94-1	Toluene	APP-9-172	2,4,5-Trichlorophenol	95-95-4	MeOH	APP-9-206
1,2,3,7,8-PCDF (5 µg/mL)	57117-41-6	Toluene	APP-9-171	2,4,6-Trichlorophenol	88-06-2	MeOH	APP-9-207
2,3,7,8-TCDF (5 µg/mL)	51207-31-9	Toluene	APP-9-170	1,2,3-Trichloropropane	96-18-4	MeOH	APP-9-208
				O,O,O-Triethyl phosphorothioate	126-68-1	MeOH	APP-9-209
				sym-Trinitrobenzene	99-35-4	MeOH	APP-9-210
				Vinyl acetate *	108-05-4	MeOH	APP-9-211
				Vinyl chloride	75-01-4	MeOH	APP-9-212
				Xylene (total)	1330-20-7	MeOH	APP-9-213

Volatile Appendix IX Mixtures

M-8240A *
0.2 mg/mL each in MeOH

1 x 1 mL
41 comps.

Acetone
Acrolein
Acrylonitrile
Benzene
Bromodichloromethane
Bromoform
2-Butanone
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroform
Dibromochloromethane
cis-1,4-Dichloro-2-butene *
trans-1,4-Dichloro-2-butene **
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane

cis-1,3-Dichloropropene *
trans-1,3-Dichloropropene **
Ethanol
Ethylbenzene
2-Hexanone
Iodomethane
4-Methyl-2-pentanone
Methylene chloride
Styrene
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Vinyl acetate
o-Xylene
m-Xylene
p-Xylene

* *cis* (1.06 x conc.)
** *trans* (0.94 x conc.)
+ *cis* (0.1 mg/mL)
++ *trans* (0.1 mg/mL)

M-502B
M-502B-PAK SAVE
0.2 mg/mL each in MeOH

Bromomethane
Chloromethane
Chloroethane
Dichlorodifluoromethane
Trichlorofluoromethane
Vinyl chloride

1 x 1 mL
5 x 1 mL
6 comps.

M-8240C
0.2 mg/mL each in MeOH

1 x 1 mL
17 comps.

Acetonitrile
Allyl chloride
1,2-Dibromo-3-chloropropane
Dibromomethane
1,2-Dibromoethane
1,4-Dioxane
Ethyl methacrylate
Isobutyl alcohol
Methacrylonitrile
Methyl methacrylate
Nitrobenzene
Pentachloroethane
Propionitrile
Pyridine
1,1,1,2-Tetrachloroethane
1,2,4-Trichlorobenzene
1,2,3-Trichloropropane

* ColdPAK required to maintain integrity of product.



EPA Method 8000 Series

Appendix IX Special Mixtures

Special Mixtures for Laboratories Testing Appendix IX Analytes

Volatile Mixtures

S-168A
0.5 mg/mL each in MeOH

1 x 1 mL
14 comps.

S-181M
0.1 mg/mL each in MeOH

1 x 1 mL
6 comps.

Acetonitrile
Acrolein
Acrylonitrile
Allyl chloride
1,2-Dibromoethane (*Ethylene dibromide*)
1,2-Dibromo-3-chloropropane (*Fumazone*)
Dibromomethane

1,4-Dioxane
Ethyl cyanide (*Propionitrile*)
Iodomethane
Isobutanol
Methacrylonitrile
1,1,1,2-Tetrachloroethane
1,2,3-Trichloropropane

bis(2-Chloro-1-methylethyl) ether
Dichlorodifluoromethane
Ethyl methacrylate

Methyl methacrylate
Pentachloroethane
Pyridine

Semi-Volatile Mixtures

S-168-R1-SET

2 x 1 mL
(S-168-MIXA-R1, S-168-MIXB)

Mix 1

S-168-MIXA-R1
500 µg/mL each in CH₂Cl₂

1 x 1 mL
4 comps.

3,3'-Dimethylbenzidine
1,4-Naphthoquinone

4-Nitroquinoline-1-oxide
p-Phenylenediamine

Mix 2

S-168-MIXB
500 µg/mL each in CH₂Cl₂

1 x 1 mL
38 comps.

Acetophenone
2-Acetylaminofluorene
4-Aminobiphenyl
Aramite
2-sec-Butyl-4,6-dinitrophenol
m-Cresol
2,6-Dichlorophenol
p-Dimethylamino azobenzene
(*Methyl Yellow*)
7,12-Dimethylbenz[*a*]anthracene
m-Dinitrobenzene
Ethyl methacrylate
Ethyl methanesulfonate
Hexachlorophene
Hexachloropropene
Isosafrole
Methapyrilene
3-Methylcholanthrene
Methyl methacrylate
Methyl methanesulfonate

1-Naphthylamine
2-Naphthylamine
N-Nitrosodi-*n*-butylamine
N-Nitrosodiethylamine
N-Nitrosomethylethylamine
N-Nitrosomorpholine
N-Nitrosopyrrolidine
5-Nitro-*o*-toluidine
Pentachlorobenzene
Pentachloroethane
Pentachloronitrobenzene
Phenacetin
2-Picoline
Pronamide
Pyridine
Safrole
1,2,4,5-Tetrachlorobenzene
2,3,4,6-Tetrachlorophenol
o-Toluidine

2-Part Label System

Smudgeproof, tear and solvent resistant * (Organic products in ampules)

Part One can be placed into a laboratory journal to document the standard used for the analysis. This label section includes the catalog number, description, lot number, expiration date, safety information, proper storage conditions and documents AccuStandard as the manufacturer.

Part Two duplicates required information for labeling transfer vial(s) with correct information.

* Includes the most common solvents:
Methylene chloride, Methanol and Acetone



EPA Method 8000 Series

Volatile Internal (ISTD) / Surrogate(SS) Standards



With more proposed and promulgated methods available, analytical chemists are trying to combine analyte lists and shorten run times while still demonstrating method equivalence. AccuStandard has formulated a core evaluation deuterated solution and a second conventional internal/surrogate evaluation solution. These formulations allow the analyst to quickly evaluate ISTD/SS combinations for PID, Hall, FID or GC/MS applications.

Volatile ISTD & SS

Popular Internal Standards

M-502-IS 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

1-Chloro-2-bromopropane
Fluorobenzene

M-524-IS-2 1 x 1 mL
2.0 mg/mL in MeOH

Fluorobenzene

M-524-IS 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

1,2-Dichlorobenzene-d₄
Fluorobenzene

M-502-IS-2 1 x 1 mL
2.0 mg/mL each in MeOH 3 comps.

1-Chloro-2-bromopropane
Fluorobenzene
Methylene chloride-d₂

M-001R 1 x 1 mL
2.0 mg/mL each in MeOH 3 comps.

Bromochloromethane
1,4-Dichlorobutane
2-Bromo-1-chloropropane

M-8020-IS 1 x 1 mL
0.2 mg/mL each in MeOH 2 comps.

4-Bromofluorobenzene
α,α,α-Trifluorotoluene

M-8240/60-IS 1 x 1 mL
0.2 mg/mL each in MeOH 5 comps.

Bromochloromethane
Chlorobenzene-d₅
1,4-Dichlorobenzene-d₄
1,4-Difluorobenzene
Pentafluorobenzene

M-8260-IS-R 1 x 1 mL
0.2 mg/mL each in MeOH 4 comps.

2-Bromo-1-chloropropane
1,4-Difluorobenzene
1,4-Dichlorobenzene-d₄
Pentafluorobenzene

M-8260-IS 1 x 1 mL
0.2 mg/mL each in MeOH 4 comps.

Chlorobenzene-d₅
1,4-Difluorobenzene
1,4-Dichlorobenzene-d₄
Pentafluorobenzene

M-8260A/B-IS 1 x 1 mL
0.2 mg/mL each in MeOH 3 comps.

Chlorobenzene-d₅
1,4-Dichlorobenzene-d₄
Fluorobenzene

ISTD/SS Evaluation Mixtures

Conventional ISTD/SS Evaluation Mix

M-CONV-IS/SS 1 x 1 mL
200 µg/mL each in MeOH 15 comps.

2-Bromochlorobenzene	2-Chloropropane
4-Bromochlorobenzene	Dibromofluoromethane
Bromochloromethane	1,4-Dichlorobutane
p-Bromofluorobenzene	1,4-Difluorobenzene
2-Bromo-1-chloropropane	Fluorobenzene
1-Chloro-2-fluorobenzene	Pentafluorobenzene
1-Chloro-3-fluorobenzene	α,α,α-Trifluorotoluene
1-Chloro-4-fluorobenzene	

Popular Surrogate Standards

M-502-IS-ASL 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

2-Bromo-1-chloropropane
1-Chloro-2-fluorobenzene

M-524-SS 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

4-Bromofluorobenzene
1,2-Dichlorobenzene-d₄

M-624-SS-M 1 x 1 mL
2.0 mg/mL each in MeOH 3 comps.

4-Bromofluorobenzene
Fluorobenzene
Pentafluorobenzene

M-8020-SS 1 x 1 mL
2.0 mg/mL each in MeOH 3 comps.

4-Bromochlorobenzene
1,4-Difluorobenzene
Fluorobenzene

M-8021-SS 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

4-Bromochlorobenzene
1,4-Dichlorobutane

M-8021-SS-M 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

Bromochloromethane
1,4-Dichlorobutane

M-8021A-SS 1 x 1 mL
2.0 mg/mL each in MeOH 4 comps.

4-Bromochlorobenzene
Bromochloromethane
1,4-Dichlorobutane
2-Bromo-1-chloropropane

M-8240/60-SS 1 x 1 mL
0.2 mg/mL each in MeOH 4 comps.

p-Bromofluorobenzene
Dibromofluoromethane
1,2-Dichloroethane-d₄
Toluene-d₈

Deuterated ISTD/SS Evaluation Mix

M-DEUT-IS/SS 1 x 1 mL
200 µg/mL each in MeOH 8 comps.

Benzene-d ₆	1,2-Dichlorobenzene-d ₄
Chlorobenzene-d ₅	Ethylbenzene-d ₁₀
1,2-Dichlorobenzene-d ₄	Methylene chloride-d ₂
1,4-Dichlorobenzene-d ₄	Toluene-d ₈

Popular ISTD/SS Standards

M-502-IS/SS 1 x 1 mL
2.0 mg/mL each in MeOH 4 comps.

1-Chloro-3-fluorobenzene
2-Chloropropane
Fluorobenzene
α,α,α-Trifluorotoluene

M-524-FS 1 x 1 mL
2.0 mg/mL each in MeOH 3 comps.

4-Bromofluorobenzene
1,2-Dichlorobenzene-d₄
Fluorobenzene

M-8010-IS/SS 1 x 1 mL
150 µg/mL each in MeOH 3 comps.

4-Bromochlorobenzene
Bromochloromethane
4-Bromofluorobenzene

M-8020-IS/SS-ASL 1 x 1 mL
1.5 mg/mL each in MeOH 5 comps.

4-Bromochlorobenzene
p-Bromofluorobenzene
1,4-Difluorobenzene
Fluorobenzene
α,α,α-Trifluorotoluene

M-8240/60-IS/SS 1 x 1 mL
0.2 mg/mL each in MeOH 9 comps.

Bromochloromethane
p-Bromofluorobenzene
Chlorobenzene-d₅
Dibromofluoromethane
1,4-Dichlorobenzene-d₄
1,2-Dichloroethane-d₄
1,4-Difluorobenzene
Pentafluorobenzene
Toluene-d₈

M-8260A/B-IS/SS 1 x 1 mL
200 µg/mL each in MeOH 7 comps.

p-Bromofluorobenzene
Chlorobenzene-d₅
Dibromofluoromethane
1,4-Dichlorobenzene-d₄
1,2-Dichloroethane-d₄
Fluorobenzene
Toluene-d₈



EPA Method 8000 Series

Method 8010 Halogenated VOCs by GC/ELCD (Hall)

Method 8010 Purgeable Halocarbon Set

M-601-SET *	4 x 1 mL
0.2 mg/mL in MeOH	(M-601A, M-502B, M-601C, M-501)
M-601-10X-SET *	4 x 1 mL
2.0 mg/mL in MeOH	(M-601A-10X, M-502B-10X, M-601C-10X, M-501-10X)

Liquids

M-601A	1 x 1 mL
M-601A-PAK	5 x 1 mL
0.2 mg/mL each in MeOH	SAVE
M-601A-10X	1 x 1 mL
2.0 mg/mL each in MeOH	18 comps.
Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropylene *
Chlorobenzene	<i>trans</i> -1,3-Dichloropropylene **
1,2-Dichlorobenzene	Methylene chloride
1,3-Dichlorobenzene	1,1,2,2-Tetrachloroethane
1,4-Dichlorobenzene	Tetrachloroethylene
1,1-Dichloroethane	1,1,1-Trichloroethane
1,2-Dichloroethane	1,1,2-Trichloroethane
1,1-Dichloroethylene	Trichloroethylene
<i>trans</i> -1,2-Dichloroethylene	* <i>cis</i> (1.06 x conc.)
1,2-Dichloropropane	** <i>trans</i> (0.94 x conc.)

Gases

M-502B	1 x 1 mL
M-502B-PAK	5 x 1 mL
0.2 mg/mL each in MeOH	SAVE
M-502B-10X	1 x 1 mL
2.0 mg/mL each in MeOH	6 comps.
Bromomethane	Dichlorodifluoromethane
Chloromethane	Trichlorofluoromethane
Chloroethane	Vinyl chloride

Liquid Component

M-601C *	1 x 1 mL
M-601C-PAK *	5 x 1 mL
0.2 mg/mL in MeOH	SAVE
M-601C-10X *	1 x 1 mL
2.0 mg/mL in MeOH	
2-Chloroethylvinyl ether	

Trihalomethanes

M-501	1 x 1 mL
M-501-PAK	5 x 1 mL
0.2 mg/mL each in MeOH	SAVE
M-501-10X	1 x 1 mL
2.0 mg/mL each in MeOH	4 comps.
Bromoform	Dichlorobromomethane
Chloroform	Dibromochloromethane

Method 8010 Additional Analytes

M-8010R-1	1 x 1 mL
0.2 mg/mL each in MeOH	9 comps.
Benzylchloride	4-Chlorotoluene
Bromobenzene	Dibromomethane
bis(2-Chloroethoxy)methane	1,1,1,2-Tetrachloroethane
1-Chlorohexane	1,2,3-Trichloropropane
Chloromethylmethyl ether	

Surrogate Standard

M-001R	1 x 1 mL
M-001R-PAK	5 x 1 mL
20 mg/mL each in MeOH	3 comps.
Bromochloromethane	2-Bromo-1-chloropropane
1,4-Dichlorobutane	

Halogenated VOCs by GC/ECLD (Hall)

M-8010A-SET *	2 x 1 mL
	(M-8010A-M, M-601C)

Method 8010A (Methanol Version)

M-8010A-M	1 x 1 mL
0.2 mg/mL each in MeOH	33 comps.
Benzylchloride	1,2-Dichloroethane
Bromobenzene	1,1-Dichloroethylene
Bromoform	<i>trans</i> -1,2-Dichloroethylene
Bromomethane	1,2-Dichloropropane
Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropylene *
Chlorobenzene	<i>trans</i> -1,3-Dichloropropylene **
Chloroethane	Methylene chloride
Chloroform	1,1,1,2-Tetrachloroethane
Chloromethane	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethylene
Dibromomethane	1,1,1-Trichloroethane
1,2-Dichlorobenzene	1,1,2-Trichloroethane
1,3-Dichlorobenzene	Trichloroethylene
1,4-Dichlorobenzene	Trichlorofluoromethane
Dichlorobromomethane	1,2,3-Trichloropropane
Dichlorodifluoromethane	Vinyl chloride
1,1-Dichloroethane	* 1.06 times conc.
	** 0.94 times conc.

M-601C *	1 x 1 mL
0.2 mg/mL in MeOH	
2-Chloroethylvinyl ether	

Internal & Surrogate Standard

M-8010-IS/SS	1 x 1 mL
M-8010-IS/SS-PAK	5 x 1 mL
150 µg/mL each in MeOH	3 comps.
4-Bromochlorobenzene	
4-Bromofluorobenzene	
Bromochloromethane	

* ColdPAK required to maintain integrity of product.

Method 8010A Acetonitrile Version

Method 8010A (Acetonitrile Version)

M-8010A	1 x 1 mL
0.2 mg/mL each in AcCN	34 comps.
Benzylchloride	1,2-Dichlorobenzene
Bromobenzene	1,3-Dichlorobenzene
Bromoform	1,4-Dichlorobenzene
Bromomethane	Dichlorobromomethane
Carbon tetrachloride	Dichlorodifluoromethane
Chlorobenzene	1,1-Dichloroethane
Chloroethane	1,2-Dichloroethane
2-Chloroethylvinyl ether	1,1-Dichloroethylene
Chloroform	<i>trans</i> -1,2-Dichloroethylene
Chloromethane	1,2-Dichloropropane
Dibromochloromethane	<i>cis</i> -1,3-Dichloropropylene *
Dibromomethane	<i>trans</i> -1,3-Dichloropropylene **
Methylene chloride	
1,1,1,2-Tetrachloroethane	
1,1,2,2-Tetrachloroethane	
Tetrachloroethylene	
1,1,1-Trichloroethane	
1,1,2-Trichloroethane	
Trichloroethylene	
Trichlorofluoromethane	
1,2,3-Trichloropropane	
Vinyl chloride	
	* 1.06 times conc.
	** 0.94 times conc.

Method 8010B Halogenated VOCs by GC/ELCD (Hall)

Halogenated Volatiles (Acetonitrile Version)

M-8010A	1 x 1 mL
0.2 mg/mL each in AcCN	34 comps.
Benzylchloride	1,2-Dichloroethane
Bromobenzene	1,1-Dichloroethylene
Bromoform	<i>trans</i> -1,2-Dichloroethylene
Bromomethane	1,2-Dichloropropane
Carbon tetrachloride	<i>cis</i> -1,3-Dichloropropylene *
Chlorobenzene	<i>trans</i> -1,3-Dichloropropylene **
Chloroethane	Methylene chloride
2-Chloroethylvinyl ether	1,1,1,2-Tetrachloroethane
Chloroform	1,1,2,2-Tetrachloroethane
Chloromethane	Tetrachloroethylene
Dibromochloromethane	1,1,1-Trichloroethane
Dibromomethane	1,1,2-Trichloroethane
1,2-Dichlorobenzene	Trichloroethylene
1,3-Dichlorobenzene	Trichlorofluoromethane
1,4-Dichlorobenzene	1,2,3-Trichloropropane
Dichlorobromomethane	Vinyl chloride
Dichlorodifluoromethane	
1,1-Dichloroethane	

* 1.06 times conc.
** 0.94 times conc.

Halogenated Volatiles (Methanol Versions)

Mix #1

M-8010B	1 x 1 mL
0.2 mg/mL each in MeOH	40 comps.
Allyl chloride	1,1-Dichloroethane
Bromobenzene	1,2-Dichloroethane
Bromoform	1,1-Dichloroethene
Bromomethane	<i>trans</i> -1,2-Dichloroethene
Carbon tetrachloride	1,2-Dichloropropane
Chlorobenzene	1,3-Dichloro-2-propanol
Chloroethane	<i>cis</i> -1,3-Dichloropropene *
2-Chloroethanol	<i>trans</i> -1,3-Dichloropropene **
Chloroform	Ethylene dibromide
1-Chlorohexane	Methylene chloride
Chloromethane	1,1,1,2-Tetrachloroethane
4-Chlorotoluene	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,2-Dibromo-3-chloropropane	1,1,1-Trichloroethane
Dibromomethane	1,1,2-Trichloroethane
1,2-Dichlorobenzene	Trichloroethene
1,3-Dichlorobenzene	Trichlorofluoromethane
1,4-Dichlorobenzene	1,2,3-Trichloropropane
Dichlorobromomethane	Vinyl chloride
1,4-Dichloro-2-butene	
Dichlorodifluoromethane	

* 1.06 times conc.
** 0.94 times conc.

Mix #2

M-8021B-X1	1 x 1 mL
0.2 mg/mL each in MeOH	5 comps.
Benzyl chloride	bis(2-Chloro-1-methylethyl) ether
bis(2-Chloroethoxy)methane	Epichlorohydrin
2-Chloroethylvinyl ether	

Internal and Surrogate Standard

M-8010-IS/SS	1 x 1 mL
M-8010-IS/SS-PAK	5 x 1 mL
150 µg/mL each in MeOH	3 comps.
4-Bromochlorobenzene	4-Bromofluorobenzene
Bromochloromethane	

Surrogate Standard

M-001R	1 x 1 mL
M-001R-PAK	5 x 1 mL
20 mg/mL each in MeOH	3 comps
Bromochloromethane	2-Bromo-1-chloropropane
1,4-Dichlorobutane	

Halogenated Volatiles

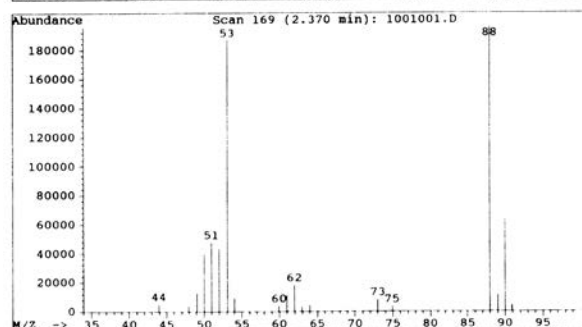
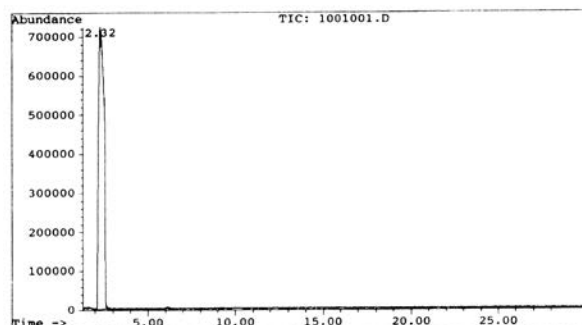
M-8021B-X2	1 x 1 mL
0.2 mg/mL each in Pentane	2 comps.
Bromoacetone	Chloromethylmethyl ether
APP-9-030	1 x 1 mL
100 µg/mL in MeOH	
Bromodichloromethane	
APP-9-130	1 x 1 mL
100 µg/mL in MeOH	
Methyl iodide	

Chloroprene (Xylene-Free)

APP-9-048-R1	1 x 1 mL
100 µg/mL in MeOH	
APP-9-048-R1-2X	1 x 1 mL
200 µg/mL in MeOH	
APP-9-048-R1-20X	1 x 1 mL
2000 µg/mL in MeOH	
Chloroprene	

Pure Chloroprene

Unlike traditional sources, this Chloroprene does not contain any xylenes and is not contaminated with extraneous solvents and by-products of commercial Chloroprene. It will facilitate quantification of analytes by **EPA Methods 524.2, 502.2, 8010, 8021 and 8240/8260** without interference from the xylenes previously present.



Method 8011 DBCP & EDB by GC/MS

M-504-10X	1 x 1 mL
M-504-10X-PAK	5 x 1 mL
2.0 mg/mL each in MeOH	2 comps.
1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane (EDB)



EPA Method 8000 Series

Method 8015A (Rev 1, July 1992) Non-Halogenated Volatile Organics by GC/FID

M-8015A 0.2 mg/mL each in MeOH	1 x 1 mL 4 comps.
M-8015A-10X 2.0 mg/mL each in MeOH	1 x 1 mL 4 comps.
Diethyl ether	Methyl ethyl ketone
Ethanol	Methyl isobutyl ketone

Non-Halogenated Volatile Organics

M-8015-ASL 100 µg/mL each in MeOH	Alternate Source	1 x 1 mL 12 comps.
Acetonitrile	Ethyl methacrylate	
Acrylamide	Isobutyl alcohol	
2-Butanone	Methacrylonitrile	
Diethyl ether	Methyl methacrylate	
1,4-Dioxane	4-Methyl-2-pentanone	
Ethanol	Propionitrile	

Internal Standard

M-8015B-IS-10X 2.0 mg/mL each in Water	1 x 1 mL 3 comps.
2-Chloroacrylonitrile	Hexafluoro-2-propanol
Hexafluoro-2-methyl-2-propanol	

Method 8015B Non-Halogenated Organics by GC/FID

M-8015B/5031-R-SET set of 27 x 1 mL
Each at 10 mg/mL in H₂O

Compound	Cat. No.	1 mL
Acetone	M-8015B/5031-01	
Acetonitrile	M-8015B/5031-02	
Acrolein	M-8015B/5031-03	
Acrylonitrile	M-8015B/5031-04	
Allyl alcohol	M-8015B/5031-05	
1-Butanol	M-8015B/5031-06	
<i>t</i> -Butanol	M-8015B/5031-07	
Crotonaldehyde	M-8015B/5031-08	
Diethyl ether	M-8015B/5031-09	
<i>p</i> -Dioxane	M-8015B/5031-10	
Ethanol	M-8015B/5031-11	
Ethyl acetate	M-8015B/5031-12	
Ethylene glycol	M-8015B/5031-13	
Ethylene oxide (5.0 mg/mL)	M-8015B/5031-14-R1 *	
Isobutyl alcohol	M-8015B/5031-15	
Isopropanol	M-8015B/5031-16	
Methanol	M-8015B/5031-17	
Methyl ethyl ketone	M-8015B/5031-18	
4-Methyl-2-pentanone	M-8015B/5031-19	
<i>N</i> -Nitrosodi- <i>n</i> -butylamine (0.5 mg/mL)	M-8015B/5031-20	
Paraldehyde	M-8015B/5031-21	
2-Pentanone	M-8015B/5031-22	
2-Picoline	M-8015B/5031-23	
1-Propanol	M-8015B/5031-24	
Propionitrile	M-8015B/5031-25	
Pyridine	M-8015B/5031-26	
<i>o</i> -Toluidine	M-8015B/5031-27	

Method 5031 GC/FID Internal Standards for Method 8015B/5031 Azeotropic Distillation

M-8260/5031-IS-FID 5.0 mg/mL each in H ₂ O	1 x 1 mL 3 comps.
2-Chloroacetonitrile	Hexafluoro-2-propanol
Hexafluoro-2-methyl-2-propanol	

Technical Note

Method 5031 describes the separation procedures for non-purgeable, water-soluble and volatile organic compounds in aqueous samples of leachates from solid matrices using azeotropic distillation.

Method 8015B is the GC/FID analytical method of analysis. Fuels referenced for analysis by method 8015B can be found in LUFT/LUST.

Method 8020 Aromatic Volatiles by PID

Aromatic Volatile Analytes

M-8020 0.2 mg/mL each in MeOH	1 x 1 mL 10 comps.
M-8020-10X 2.0 mg/mL each in MeOH	1 x 1 mL 5 x 1 mL 10 comps.
M-8020-10X-PAK	SAVE
Benzene	Ethylbenzene
Chlorobenzene	Toluene
1,2-Dichlorobenzene	<i>o</i> -Xylene
1,3-Dichlorobenzene	<i>m</i> -Xylene
1,4-Dichlorobenzene	<i>p</i> -Xylene

M-8020B-R1 M-8020B-R1-PAK 2.0 mg/mL each in MeOH	SAVE	1 x 1 mL 5 x 1 mL 13 comps.
--	-------------	-----------------------------------

Benzene	Pyridine
Chlorobenzene	Thiophenol
1,2-Dichlorobenzene	Toluene
1,3-Dichlorobenzene	<i>o</i> -Xylene
1,4-Dichlorobenzene	<i>m</i> -Xylene
Ethylbenzene	<i>p</i> -Xylene
2-Picoline	

Performance Check Solution

M-8020-QC M-8020-QC-PAK 2.0 mg/mL in MeOH	SAVE	1 x 1 mL 5 x 1 mL
Methyl <i>t</i> -butyl ether		

Internal Standards

M-8020-IS M-8020-IS-PAK 0.2 mg/mL each in MeOH	SAVE	1 x 1 mL 5 x 1 mL 2 comps.
M-8020-IS-10X M-8020-IS-10X-PAK 2.0 mg/mL each in MeOH	SAVE	1 x 1 mL 5 x 1 mL 2 comps.
4-Bromofluorobenzene	α,α,α -Trifluorotoluene	

Surrogate Standards

M-8020-SS M-8020-SS-PAK 2.0 mg/mL each in MeOH	SAVE	1 x 1 mL 5 x 1 mL 3 comps.
4-Bromochlorobenzene	Fluorobenzene	
1,4-Difluorobenzene		

M-8020-SS-1 2.0 mg/mL each in MeOH	1 x 1 mL
4-Bromochlorobenzene	

Combined ISTD/SS Solution

M-8020-IS/SS-ASL M-8020-IS/SS-ASL-PAK 1.5 mg/mL each in MeOH	Alternate Source SAVE	1 x 1 mL 5 x 1 mL 5 comps.
4-Bromochlorobenzene	Fluorobenzene	
<i>p</i> -Bromofluorobenzene	α,α,α -Trifluorotoluene	
1,4-Difluorobenzene		

* ColdPAK required to maintain integrity of product.



Method 8021B Purgeable Volatiles by PID/ELCD in Series

Method 8021 is used to determine volatile organic compounds in a variety of solid waste matrices using PID/ELCD detectors in series. AccuStandard segregated the analyte list into formulations that provide the widest adaptability to various types of samples and appropriate sample introduction techniques mentioned in the method.

54 Liquid Components

Benzene (01)	1,1-Dichloropropene (33)
Bromobenzene (02)	<i>cis</i> -1,3-Dichloropropene (34A) *
Bromochloromethane (03)	<i>trans</i> -1,3-Dichloropropene (34B) **
Bromodichloromethane (04)	Ethylbenzene (35)
Bromoform (05)	Hexachlorobutadiene (36)
<i>n</i> -Butylbenzene (07)	Isopropylbenzene (<i>Cumene</i>) (37)
<i>sec</i> -Butylbenzene (08)	<i>p</i> -Isopropyltoluene (<i>p-Cymene</i>) (38)
<i>tert</i> -Butylbenzene (09)	Methylene chloride (39)
Carbon tetrachloride (10)	Naphthalene (40)
Chlorobenzene (11)	<i>n</i> -Propylbenzene (41)
Chloroform (13)	Styrene (42)
2-Chlorotoluene (15)	1,1,1,2-Tetrachloroethane (43)
4-Chlorotoluene (16)	1,1,2,2-Tetrachloroethane (44)
Dibromochloromethane (17)	Tetrachloroethene (45)
1,2-Dibromo-3-chloropropane (18)	Toluene (46)
1,2-Dibromoethane (19)	1,2,3-Trichlorobenzene (47)
Dibromomethane (20)	1,2,4-Trichlorobenzene (48)
1,2-Dichlorobenzene (21)	1,1,1-Trichloroethane (49)
1,3-Dichlorobenzene (22)	1,1,2-Trichloroethane (50)
1,4-Dichlorobenzene (23)	Trichloroethene (51)
1,1-Dichloroethane (25)	1,2,3-Trichloropropane (53)
1,2-Dichloroethane (26)	1,2,4-Trimethylbenzene (54)
1,1-Dichloroethene (27)	1,3,5-Trimethylbenzene (55)
<i>cis</i> -1,2-Dichloroethene (28)	<i>o</i> -Xylene (57)
<i>trans</i> -1,2-Dichloroethene (29)	<i>m</i> -Xylene (58)
1,2-Dichloropropane (30)	<i>p</i> -Xylene (59)
1,3-Dichloropropane (31)	
2,2-Dichloropropane (32)	

* *cis* (1.06 x conc.)
** *trans* (0.94 x conc.)

6 Gas Components

Bromomethane (06)	Dichlorodifluoromethane (24)
Chloroethane (12)	Trichlorofluoromethane (52)
Chloromethane (14)	Vinyl chloride (56)

All 60 liquid & gas components in One Solution

Liquids (54 comps.) and Gases (6 comps.)

M-502	1 x 1 mL
M-502-PAK	5 x 1 mL
0.2 mg/mL each in MeOH	
M-502-10X	1 x 1 mL
M-502-10X-PAK	5 x 1 mL
2.0 mg/mL each in MeOH	60 comps.

59 Component Set

As a complete set of each component in individual ampules.

M-502-SET	0.2 mg/mL in MeOH	59 x 1 mL
M-502-10X-SET	2.0 mg/mL in MeOH	59 x 1 mL

Individual Component Solutions

To order, specify identity (#) and conc. (0.2 or 2.0 mg/mL)

M-502-#	0.2 mg/mL in MeOH	1 x 1 mL
M-502-#-10X	2.0 mg/mL in MeOH	1 x 1 mL
M-502-34A & M-502-34B only available as mixture: M-502-34R		
M-502-34-R		1 x 1 mL
0.4 mg/mL each in MeOH		
M-502-34-R-10X		1 x 1 mL
4.0 mg/mL each in MeOH		2 comps.
<i>cis</i> -1,3-Dichloropropene	<i>trans</i> -1,3-Dichloropropene	

Individual Component Neats

To order, specify identity (#)

M-502-#N	1 x 1 gram
except M-502-32N & M-502-43N	1 x 1 gram

Halogenated Non-Aromatic Volatiles Solution #1

M-8021B-NAV	1 x 1 mL
M-8021B-NAV-PAK	5 x 1 mL
0.2 mg/mL each in MeOH	35 comps.

SAVE

Bromochloromethane	Dichloromethane
Bromodichloromethane	1,2-Dichloropropane
Bromoform	1,3-Dichloropropane
Bromomethane	2,2-Dichloropropane
Carbon tetrachloride	1,1-Dichloropropene
Chloroethane	<i>cis</i> -1,3-Dichloropropene
Chloroform	<i>trans</i> -1,3-Dichloropropene
Chlorodibromomethane	Hexachlorobutadiene
Chloromethane	Tetrachloroethene
1,2-Dibromo-3-chloropropane	1,1,1,2-Tetrachloroethane
1,2-Dibromoethane	1,1,2,2-Tetrachloroethane
Dibromomethane	Trichloroethene
Dichlorodifluoromethane	1,1,1-Trichloroethane
1,1-Dichloroethane	1,1,2-Trichloroethane
1,2-Dichloroethane	Trichlorofluoromethane
1,1-Dichloroethene	1,2,3-Trichloropropane
<i>cis</i> -1,2-Dichloroethene	Vinyl chloride
<i>trans</i> -1,2-Dichloroethene	

Aromatic Volatiles Solution #2

M-8021B-AV	1 x 1 mL
M-8021B-AV-PAK	5 x 1 mL
0.2 mg/mL each in MeOH	25 comps.

SAVE

Benzene	Isopropylbenzene
Bromobenzene	<i>p</i> -Isopropyltoluene
<i>n</i> -Butylbenzene	Naphthalene
<i>sec</i> -Butylbenzene	<i>n</i> -Propylbenzene
<i>tert</i> -Butylbenzene	Styrene
Chlorobenzene	Toluene
2-Chlorotoluene	1,2,3-Trichlorobenzene
4-Chlorotoluene	1,2,4-Trichlorobenzene
1,2-Dichlorobenzene	1,2,4-Trimethylbenzene
1,3-Dichlorobenzene	1,3,5-Trimethylbenzene
1,4-Dichlorobenzene	<i>o</i> -Xylene
Ethylbenzene	<i>m</i> -Xylene
	<i>p</i> -Xylene

Halogenated Volatiles Solution #3

M-8021B-X1	1 x 1 mL
0.2 mg/mL each in MeOH	8 comps.

Allyl chloride	bis(2-Chloroisopropyl) ether
Benzyl chloride	Chloroprene (Xylene-free)
2-Chloroethanol	1,3-Dichloro-2-propanol
2-Chloroethylvinyl ether	Epichlorohydrin

Halogenated Volatiles Solution #4

M-8021B-X2	1 x 1 mL
0.2 mg/mL each in Pentane	2 comps.

Bromoacetone	Chloromethyl methyl ether
--------------	---------------------------



EPA Method 8000 Series

Method 8021B Purgeable Volatiles by PID/ELCD (Hall)

Internal Standard Solutions

M-8021B-IS		1 x 1 mL
M-8021B-IS-PAK	SAVE	5 x 1 mL
5 µg/mL each in MeOH		
M-8021B-IS-10X		1 x 1 mL
M-8021B-IS-10X-PAK	SAVE	5 x 1 mL
50 µg/mL each in MeOH		
M-8021B-IS-100X		1 x 1 mL
M-8021B-IS-100X-PAK	SAVE	5 x 1 mL
500 µg/mL each in MeOH		2 comps.
2-Bromo-1-chloropropane	Fluorobenzene	

Purgeable Internal Standards

M-001R-0.75X		1 x 1 mL
M-001R-0.75X-PAK	SAVE	5 x 1 mL
15 mg/mL each in MeOH		
M-001R-0.075X		1 x 1 mL
M-001R-0.075X-PAK	SAVE	5 x 1 mL
1.5 mg/mL each in MeOH		
M-001R-0.0075X		1 x 1 mL
M-001R-0.0075X-PAK	SAVE	5 x 1 mL
150 µg/mL each in MeOH		3 comps.
Bromochloromethane	2-Bromo-1-chloropropane	
1,4-Dichlorobutane		

Surrogate Standard Solutions

M-8021B-SS		1 x 1 mL
M-8021B-SS-PAK	SAVE	5 x 1 mL
15 µg/mL each in MeOH		
M-8021B-SS-10X		1 x 1 mL
M-8021B-SS-10X-PAK	SAVE	5 x 1 mL
150 µg/mL each in MeOH		
M-8021B-SS-100X		1 x 1 mL
M-8021B-SS-100X-PAK	SAVE	5 x 1 mL
1,500 µg/mL each in MeOH		2 comps.
4-Bromochlorobenzene	1,4-Dichlorobutane	

Surrogate Standards

M-8021-SS		1 x 1 mL
M-8021-SS-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		2 comps.
4-Bromochlorobenzene	1,4-Dichlorobutane	

M-8021-SS-M		1 x 1 mL
M-8021-SS-M-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		2 comps.
Bromochloromethane	1,4-Dichlorobutane	

M-001R		1 x 1 mL
M-001R-PAK	SAVE	5 x 1 mL
20 mg/mL each in MeOH		3 comps.
Bromochloromethane	2-Bromo-1-chloropropane	
1,4-Dichlorobutane		

M-8021A-SS		1 x 1 mL
M-8021A-SS-PAK	SAVE	5 x 1 mL
20 mg/mL each in MeOH		4 comps.
4-Bromochlorobenzene	1,4-Dichlorobutane	
Bromochloromethane	2-Bromo-1-chloropropane	

Chloroprene Solution

APP-9-048-R1-2X		1 x 1 mL
0.2 mg/mL in MeOH		
Chloroprene (Xylene-free)		

Method 8030A Acrolein & Acrylonitrile by GC/FID

M-603-10X		1 x 1 mL
10 mg/mL each in Water		2 comps.
Acrolein	Acrylonitrile	

Method 8031 Acrylonitrile by GC/NPD

APP-9-008-10X		1 x 1 mL
APP-9-008-10X-PAK	SAVE	5 x 1 mL
1.0 mg/mL in MeOH		
Acrylonitrile		

Method 8032/8032A Acrylamide by GC/ECD

Acrylamide		
M-8032		1 x 1 mL
M-8032-PAK	SAVE	5 x 1 mL
1.0 mg/mL in MeOH		
Acrylamide		

Brominated Analyte

M-8032B		1 x 1 mL
M-8032B-PAK	SAVE	5 x 1 mL
0.1 mg/mL in Ethyl acetate		
2,3-Dibromopropionamide		

Internal Standard

M-8032-IS		1 x 1 mL
M-8032-IS-PAK	SAVE	5 x 1 mL
0.1 mg/mL in Ethyl acetate		
Dimethyl phthalate		

Method 8033 Acrylonitrile by GC/NPD

Acrylonitrile		
M-8033		1 x 1 mL
M-8033-PAK	SAVE	5 x 1 mL
1,000 µg/mL in H ₂ O		
Acrylonitrile		

Buy AccuPAKs™
Save 20-40% 5 x 1 mL





Method 8040 Phenols, PFB Derivatives by GC/ECD

Phenols, PFB Derivatives Set

M-8040-PFB-SET

Each at 0.2 mg/mL in Isopropyl alcohol

19 x 1 mL

(01) 4-Chloro-3-cresol	(11) Dinoseb
(02) <i>o</i> -Chlorophenol	(12) 2-Methyl-4,6-dinitrophenol
(03) <i>m</i> -Cresol	(13) <i>o</i> -Nitrophenol
(04) <i>o</i> -Cresol	(14) <i>p</i> -Nitrophenol
(05) <i>p</i> -Cresol	(15) Pentachlorophenol
(06) 2-Cyclohexyl-4,6-dinitrophenol (<i>Dinex</i>)	(16) Phenol
(07) 2,4-Dichlorophenol	(17) 2,3,4,6-Tetrachlorophenol
(08) 2,6-Dichlorophenol	(18) 2,4,5-Trichlorophenol
(09) 2,4-Dimethylphenol	(19) 2,4,6-Trichlorophenol
(10) 2,4-Dinitrophenol	

Phenols, PFB Derivatives - Mix A

M-8040A-R-PFB

M-8040A-R-PFB-PAK

0.2 mg/mL each in MeOH

SAVE

1 x 1 mL

5 x 1 mL

10 comps.

4-Chloro-3-cresol	<i>o</i> -Nitrophenol
<i>o</i> -Cresol	<i>p</i> -Nitrophenol
2-Cyclohexyl-4,6-dinitrophenol (<i>Dinex</i>)	2,4,6-Trichlorophenol
2,4-Dichlorophenol	Pentachlorophenol
2-Methyl-4,6-dinitrophenol	Phenol

Phenols, PFB Derivatives - Mix B

M-8040B-R-PFB

M-8040B-R-PFB-PAK

0.2 mg/mL each in MeOH

SAVE

1 x 1 mL

5 x 1 mL

9 comps.

<i>o</i> -Chlorophenol	2,4-Dinitrophenol
<i>m</i> -Cresol	Dinoseb
<i>p</i> -Cresol	2,3,4,6-Tetrachlorophenol
2,6-Dichlorophenol	2,4,5-Trichlorophenol
2,4-Dimethylphenol	

Technical Note

2,4-Dinitrophenol, 4-nitrophenol, and pentachlorophenol are susceptible to adsorption on active surfaces found in injection ports or contaminated columns.

Surrogate Standard

M-8040-SS

M-8040-SS-PAK

2.0 mg/mL each in Isopropyl alcohol

SAVE

1 x 1 mL

5 x 1 mL

2 comps.

2-Fluorophenol	2,4,6-Tribromophenol
----------------	----------------------

Surrogate Standard, PFB Derivatives

M-8040-SS-PFB

M-8040-SS-PFB-PAK

2.0 mg/mL each in MeOH

SAVE

1 x 1 mL

5 x 1 mL

2 comps.

2-Fluorophenol	2,4,6-Tribromophenol
----------------	----------------------

Method 8040A Phenols by GC/FID

Phenol Set

M-8040-SET

Each at 1.0 mg/mL in MeOH

19 x 1 mL

(01) 4-Chloro-3-cresol	(11) Dinoseb
(02) <i>o</i> -Chlorophenol	(12) 2-Methyl-4,6-dinitrophenol
(03) <i>m</i> -Cresol	(13) <i>o</i> -Nitrophenol
(04) <i>o</i> -Cresol	(14) <i>p</i> -Nitrophenol
(05) <i>p</i> -Cresol	(15) Pentachlorophenol
(06) 2-Cyclohexyl-4,6-dinitrophenol (<i>Dinex</i>)	(16) Phenol
(07) 2,4-Dichlorophenol	(17) 2,3,4,6-Tetrachlorophenol
(08) 2,6-Dichlorophenol	(18) 2,4,5-Trichlorophenol
(09) 2,4-Dimethylphenol	(19) 2,4,6-Trichlorophenol
(10) 2,4-Dinitrophenol	

Mix A

M-8040A-R

M-8040A-R-PAK

2.0 mg/mL each in Isopropyl alcohol

SAVE

1 x 1 mL

5 x 1 mL

10 comps.

4-Chloro-3-cresol	<i>o</i> -Nitrophenol
<i>o</i> -Cresol	<i>p</i> -Nitrophenol
2-Cyclohexyl-4,6-dinitrophenol (<i>Dinex</i>)	2,4,6-Trichlorophenol
2,4-Dichlorophenol	Pentachlorophenol
2-Methyl-4,6-dinitrophenol	Phenol

Mix B

M-8040B-R

M-8040B-R-PAK

2.0 mg/mL each in Isopropyl alcohol

SAVE

1 x 1 mL

5 x 1 mL

9 comps.

<i>o</i> -Chlorophenol	2,4-Dinitrophenol
<i>m</i> -Cresol	Dinoseb
<i>p</i> -Cresol	2,3,4,6-Tetrachlorophenol
2,6-Dichlorophenol	2,4,5-Trichlorophenol
2,4-Dimethylphenol	

Phenols QC Check Standard

M-8040A-ASL

M-8040A-ASL-PAK

100 µg/mL each in Isopropyl alcohol

M-8040A-ASL-20X

2000 µg/mL each in Isopropyl alcohol

Alternate Source

SAVE

1 x 1 mL

1 x 1 mL

1 x 1 mL

19 comps.

Dinoseb	4,6-Dinitro- <i>o</i> -cresol
4-Chloro-3-methylphenol	2,4-Dinitrophenol
2-Chlorophenol	2-Nitrophenol
<i>o</i> -Cresol	4-Nitrophenol
<i>m</i> -Cresol	Pentachlorophenol
<i>p</i> -Cresol	Phenol
2-Cyclohexyl-4,6-dinitrophenol	2,3,4,6-Tetrachlorophenol
2,4-Dichlorophenol	2,4,5-Trichlorophenol
2,6-Dichlorophenol	2,4,6-Trichlorophenol
2,4-Dimethylphenol	

Method 8040/8040A Bromo Phenols and Anisoles

Bromo Phenols

Each at 100 µg/mL in Toluene

Compound	Cat. No.	1 mL	Compound	Cat. No.	1 mL
3-Bromophenol	BP-003S		2,3,4-Tribromophenol	BP-234S	
4-Bromophenol	BP-004S		2,4,5-Tribromophenol	BP-245S	
2,3-Dibromophenol	BP-023S		2,3,6-Tribromophenol	BP-236S	
2,4-Dibromophenol	BP-024S		2,4,6-Tribromophenol	BP-246S	
2,5-Dibromophenol	BP-025S		3,4,5-Tribromophenol	BP-345S	
2,6-Dibromophenol	BP-026S		2,3,4,5-Tetrabromophenol	BP-2345S	
3,5-Dibromophenol	BP-035S		2,3,4,6-Tetrabromophenol	BP-2346S	
			2,3,5,6-Tetrabromophenol	BP-2356S	
			Pentabromophenol	BP-23456S	

Bromo Anisoles (Methyl Esters)

Each at 50 µg/mL in Methanol

Compound	Cat. No.	1 mL
2-Bromoanisole	BAN-01	
3-Bromoanisole	BAN-02	
4-Bromoanisole	BAN-03	
2,3-Dibromoanisole	BAN-04	
2,4-Dibromoanisole	BAN-05	
2,5-Dibromoanisole	BAN-06	
2,6-Dibromoanisole	BAN-07	
3,5-Dibromoanisole	BAN-08	
2,4,5-Tribromoanisole	BAN-09	
2,4,6-Tribromoanisole	BAN-10	



EPA Method 8000 Series

Method 8041 Phenols by GC-FID or ECD as the Derivatives

RCRA Target Phenols Solution

M-8041		1 x 1 mL
M-8041-PAK	SAVE	5 x 1 mL
1.0 mg/mL each in Isopropanol		21 comps.
4-Chloro-3-methylphenol	4-Methylphenol (<i>p</i> -Cresol)	
2-Chlorophenol	2-Nitrophenol	
2-Cyclohexyl-4,6-dinitrophenol	4-Nitrophenol	
2,4-Dichlorophenol	Pentachlorophenol	
2,6-Dichlorophenol	Phenol	
2,4-Dimethylphenol	2,3,4,5-Tetrachlorophenol	
Dinoseb (<i>DNBP</i>)	2,3,4,6-Tetrachlorophenol	
2,4-Dinitrophenol	2,3,5,6-Tetrachlorophenol	
2-Methyl-4,6-dinitrophenol	2,4,5-Trichlorophenol	
2-Methylphenol (<i>o</i> -Cresol)	2,4,6-Trichlorophenol	
3-Methylphenol (<i>m</i> -Cresol)		

Technical Note

The method analytes were formulated into two distinct solutions to meet the needs of laboratories analyzing only the RCRA analytes or the combined RCRA/non-RCRA analytes.

Non-RCRA Target Phenols Solution

M-8041-X1		1 x 1 mL
M-8041-X1-PAK	SAVE	5 x 1 mL
1.0 mg/mL each in Isopropanol		18 comps.
2-Chloro-5-methylphenol	2,5-Dimethylphenol	
4-Chloro-2-methylphenol	2,6-Dimethylphenol	
3-Chlorophenol	3,4-Dimethylphenol	
4-Chlorophenol	2,5-Dinitrophenol	
2,3-Dichlorophenol	3-Nitrophenol	
2,5-Dichlorophenol	2,3,4-Trichlorophenol	
3,4-Dichlorophenol	2,3,5-Trichlorophenol	
3,5-Dichlorophenol	2,3,6-Trichlorophenol	
2,3-Dimethylphenol	3,4,5-Trichlorophenol	

Internal Standards

M-8041-IS		1 x 1 mL
M-8041-IS-PAK	SAVE	5 x 1 mL
50 µg/mL each in Isopropanol		
M-8041-IS-10X		1 x 1 mL
M-8041-IS-10X-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in Isopropanol		
M-8041-IS-20X		1 x 1 mL
M-8041-IS-20X-PAK	SAVE	5 x 1 mL
1.0 mg/mL each in Isopropanol		2 comps.
2,5-Dibromotoluene	2,2',5,5'-Tetrabromobiphenyl	

Surrogate Standards

M-8041-SS		1 x 1 mL
M-8041-SS-PAK	SAVE	5 x 1 mL
1.6 µg/mL in Isopropanol		
M-8041-SS-10X		1 x 1 mL
M-8041-SS-10X-PAK	SAVE	5 x 1 mL
16 µg/mL in Isopropanol		
M-8041-SS-100X		1 x 1 mL
M-8041-SS-100X-PAK	SAVE	5 x 1 mL
160 µg/mL in Isopropanol		
M-8041-SS-625X		1 x 1 mL
M-8041-SS-625X-PAK	SAVE	5 x 1 mL
1.0 mg/mL in Isopropanol		
2,4-Dibromophenol		

Method 8070A Nitrosamines by NPD/Reductive Hall or TEA

Nitrosamines

M-8070		1 x 1 mL
M-8070-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		3 comps.
N-Nitrosodimethylamine	N-Nitrosodi- <i>n</i> -propylamine	
N-Nitrosodiphenylamine		

Method 8060 Phthalate Esters by GC/ECD

Phthalate Esters

M-8060		1 x 1 mL
M-8060-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in Isooctane		6 comps.
Benzyl butyl phthalate	Di- <i>n</i> -butyl phthalate	
Diethyl phthalate	Di- <i>n</i> -octyl phthalate	
Dimethyl phthalate	bis(2-Ethylhexyl)phthalate	

M-8060-QC		1 x 1 mL
M-8060-QC-PAK	SAVE	5 x 1 mL
At stated conc. in MeOH		6 comps.

Benzyl butyl phthalate	(0.1 mg/mL)	Di- <i>n</i> -butyl phthalate	(0.25 mg/mL)
Diethyl phthalate	(0.25 mg/mL)	Di- <i>n</i> -octyl phthalate	(0.5 mg/mL)
Dimethyl phthalate	(0.25 mg/mL)	bis(2-Ethylhexyl)phthalate	(0.5 mg/mL)

Method 8061A Phthalate Esters by GC/ECD

Phthalate Esters

M-8061-R1		1 x 1 mL
M-8061-R1-PAK	SAVE	5 x 1 mL
1.0 mg/mL each in Hexane		15 comps.
bis(2- <i>n</i> -Butoxyethyl)phthalate	Dimethyl phthalate	
Butyl benzyl phthalate	Dinonyl phthalate	
Diamyl phthalate	Di- <i>n</i> -octyl phthalate	
Di- <i>n</i> -butyl phthalate	bis(2-Ethoxyethyl)phthalate	
Dicyclohexyl phthalate	bis(2-Ethylhexyl)phthalate	
Diethyl phthalate	bis(2-Methoxyethyl)phthalate	
Diethyl phthalate	bis(4-Methyl-2-pentyl)phthalate	
Diisobutyl phthalate		

M-8061A		1 x 1 mL
M-8061A-PAK	SAVE	5 x 1 mL
1.0 mg/mL each in Hexane		6 comps.

Butyl benzyl phthalate	Diethyl phthalate
bis(2-Ethylhexyl)phthalate	Dimethyl phthalate
Di- <i>n</i> -butyl phthalate	Di- <i>n</i> -octyl phthalate

Matrix Spike Solution

M-8061A-MS		1 x 1 mL
M-8061A-MS-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in Acetone		2 comps.
Butyl benzyl phthalate	bis(2-Ethylhexyl)phthalate	

Internal Standard

M-8061-IS		1 x 1 mL
M-8061-IS-PAK	SAVE	5 x 1 mL
5.0 mg/mL in Hexane		
Benzyl benzoate		

Surrogate Standards

M-8061-SS		1 x 1 mL
M-8061-SS-PAK	SAVE	5 x 1 mL
50 µg/mL each in Acetone		
M-8061-SS-10X		1 x 1 mL
M-8061-SS-10X-PAK	SAVE	5 x 1 mL
500 µg/mL each in Acetone		3 comps.
Dibenzyl phthalate	Diphenyl phthalate	
Diphenyl isophthalate		

Nitrosamines Mix

M-8270-03-ASL		1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂		9 comps.
N-Nitrosodi- <i>n</i> -butylamine	N-Nitrosomethylethylamine	
N-Nitrosodiethylamine	N-Nitrosomorpholine	
N-Nitrosodimethylamine	N-Nitrosopiperidine	
N-Nitrosodiphenylamine	N-Nitrosopyrrolidine	
N-Nitrosodi- <i>n</i> -propylamine		

Alternate Source



Method 8080A Organochlorine Pesticides and PCBs by GC/ECD

Organochlorine Pesticides

M-8080 1 x 1 mL
M-8080-PAK 5 x 1 mL
 2.0 mg/mL each in Acetone 17 comps.

SAVE

Aldrin	Endosulfan I
α-BHC	Endosulfan II
β-BHC	Endosulfan sulfate
δ-BHC	Endrin
γ-BHC	Endrin aldehyde
4,4'-DDD	Heptachlor
4,4'-DDE	Heptachlor epoxide
4,4'-DDT	Methoxychlor
Dieldrin	

Organochlorine Pesticide QC Standard

M-8080-QC-R 1 x 1 mL
M-8080-QC-R-PAK 5 x 1 mL
 At stated conc. in Acetone 17 comps.

SAVE

Aldrin (0.02 mg/mL)	Endosulfan I (0.02 mg/mL)
α-BHC (0.02 mg/mL)	Endosulfan II (0.1 mg/mL)
β-BHC (0.02 mg/mL)	Endosulfan sulfate (0.1 mg/mL)
δ-BHC (0.02 mg/mL)	Endrin (0.1 mg/mL)
γ-BHC (0.02 mg/mL)	Endrin aldehyde (0.02 mg/mL)
4,4'-DDD (0.1 mg/mL)	Heptachlor (0.02 mg/mL)
4,4'-DDE (0.02 mg/mL)	Heptachlor epoxide (0.02 mg/mL)
4,4'-DDT (0.1 mg/mL)	Methoxychlor (0.02 mg/mL)
Dieldrin (0.02 mg/mL)	

Internal Standard

M-508-IS 1 x 1 mL
M-508-IS-PAK 5 x 1 mL
 0.1 mg/mL in MtBE
 Pentachloronitrobenzene

SAVE

Surrogate Standard

CLP-032-R 1 x 1 mL
CLP-032-R-PAK 5 x 1 mL
 0.2 mg/mL each in Acetone 2 comps.

SAVE

Decachlorobiphenyl	Tetrachloro- <i>m</i> -xylene
--------------------	-------------------------------

Multi-Component Analytes

Polychlorinated Biphenyls, Chlordane & Toxaphene
 Each at 1,000 µg/mL in Hexane
AccuPAK™ (5 x 1 mL)

SAVE

Aroclors®#	Cat. No.	1 mL	Cat. No.	PAK
Aroclor 1016	C-216S-H-10X		C-216S-H-10X-PAK	
Aroclor 1221	C-221S-H-10X		C-221S-H-10X-PAK	
Aroclor 1232	C-232S-H-10X		C-232S-H-10X-PAK	
Aroclor 1242	C-242S-H-10X		C-242S-H-10X-PAK	
Aroclor 1248	C-248S-H-10X		C-248S-H-10X-PAK	
Aroclor 1254	C-254S-H-10X		C-254S-H-10X-PAK	
Aroclor 1260	C-260S-H-10X		C-260S-H-10X-PAK	
Aroclor 1262	C-262S-H-10X		C-262S-H-10X-PAK	
Aroclor 1268	C-268S-H-10X		C-268S-H-10X-PAK	

Pesticides

Chlordane	P-017S-H-10X	P-017S-H-10X-PAK
Toxaphene	P-093S-H-10X	P-093S-H-10X-PAK

Decomposition Solution

M-1618D* 1 x 1 mL
M-1618D-PAK* 5 x 1 mL
 At stated conc. in Acetone 2 comps.
 p,p'-DDT (2 µg/mL) Endrin (1 µg/mL)

SAVE

o,p-DDT and Metabolites

M-8080-OP 1 x 1 mL
M-8080-OP-PAK 5 x 1 mL
 0.25 mg/mL each in Hexane:Toluene (50:50) 3 comps.
 o,p-DDD o,p-DDT
 o,p-DDE

SAVE

Organochlorine Pesticide Mixture

M-8080A-ASL 1 x 1 mL
M-8080A-ASL-PAK 5 x 1 mL
 250 µg/mL each in Hexane:Toluene (50:50) 17 comps.

Alternate Source

SAVE

Aldrin	p,p'-DDE	Endrin
α-BHC	p,p'-DDT	Endrin aldehyde
β-BHC	Dieldrin	Heptachlor
δ-BHC	Endosulfan I	Heptachlor epoxide (Isomer B)
γ-BHC	Endosulfan II	Methoxychlor (1000 µg/mL)
p,p'-DDD	Endosulfan sulfate	

Method 8080/8081 Matrix Spike Solutions & Surrogates at Working Level

Matrix Spiking Solutions

For Water Samples

CLP-014-5ML 1 x 5 mL
CLP-014-25ML 1 x 25 mL
 At stated conc. in MeOH 6 comps.

Aldrin (200 ng/mL)	Endrin (500 ng/mL)
4,4'-DDT (500 ng/mL)	Heptachlor (200 ng/mL)
Dieldrin (500 ng/mL)	Lindane (200 ng/mL)

For Waste Samples

CLP-014-5X-5ML 1 x 5 mL
CLP-014-5X-25ML 1 x 25 mL
 At stated conc. in MeOH 6 comps.

Aldrin (1,000 ng/mL)	Endrin (2,500 ng/mL)
4,4'-DDT (2,500 ng/mL)	Heptachlor (1,000 ng/mL)
Dieldrin (2,500 ng/mL)	Lindane (1,000 ng/mL)

Surrogate Solutions

For Water Samples

CLP-032R-WL-10ML 1 x 10 mL
CLP-032R-WL-50ML 1 x 50 mL
CLP-032R-WL-100ML 1 x 100 mL
 1 µg/mL each in Acetone 2 comps.

Decachlorobiphenyl	Tetrachloro- <i>m</i> -xylene
--------------------	-------------------------------

For Waste Samples

CLP-032R-WL-5X-10ML 1 x 10 mL
CLP-032R-WL-5X-50ML 1 x 50 mL
CLP-032R-WL-5X-100ML 1 x 100 mL
 5 µg/mL each in Acetone 2 comps.

Decachlorobiphenyl	Tetrachloro- <i>m</i> -xylene
--------------------	-------------------------------

* ColdPAK required to maintain integrity of product.



EPA Method 8000 Series

Ready-to-Inject Working Level Pesticide Standards

Method 8080/8081 7 Point Working Level Pesticide Curves

AccuStandard has expanded the existing organo-halide pesticide standard line to include the working level Continuing Calibration Check Standard Line for Method 8080/8081. The working level CCC Line revolutionizes the way the analytical chemist prepares standards for pesticide analysis.

M-8080-CAL-SET

All solutions in Isooctane

7 x 1 mL
21 comps.

Components (units in ng/mL)	Level 1	Level 2 (2.5X)	Level 3 (5X)	Level 4 (10X)	Level 5 (25X)	Level 6 (50X)	Level 7 (100X)
Aldrin	2	5	10	20	50	100	200
α-BHC	2	5	10	20	50	100	200
β-BHC	2	5	10	20	50	100	200
γ-BHC	2	5	10	20	50	100	200
δ-BHC	2	5	10	20	50	100	200
α-Chlordane	2	5	10	20	50	100	200
γ-Chlordane	2	5	10	20	50	100	200
4,4'-DDD	4	10	20	40	100	200	400
4,4'-DDE	4	10	20	40	100	200	400
4,4'-DDT	4	10	20	40	100	200	400
Dieldrin	4	10	20	40	100	200	400
Endosulfan I	2	5	10	20	50	100	200
Endosulfan II	4	10	20	40	100	200	400
Endosulfan sulfate	4	10	20	40	100	200	400
Endrin	4	10	20	40	100	200	400
Endrin aldehyde	4	10	20	40	100	200	400
Heptachlor	2	5	10	20	50	100	200
Heptachlor epoxide	2	5	10	20	50	100	200
Methoxychlor	20	50	100	200	500	1,000	2,000
Tetrachloro- <i>m</i> -xylene	2	5	10	20	50	100	200
Decachlorobiphenyl	4	10	20	40	100	200	400

Level 3 Daily QC Working Level CCC (for low level curves)

M-8080-WL-5X-10ML 1 x 10 mL

M-8080-WL-5X-25ML 1 x 25 mL

M-8080-WL-5X-50ML 1 x 50 mL

At stated conc. in Isooctane

Level 4 Daily QC Working Level CCC (for higher level curves)

M-8080-WL-10X-10ML 1 x 10 mL

M-8080-WL-10X-25ML 1 x 25 mL

M-8080-WL-10X-50ML 1 x 50 mL

At stated conc. in Isooctane

Level 5 Daily QC Working Level CCC (for higher level curves)

M-8080-WL-25X-10ML 1 x 10 mL

M-8080-WL-25X-25ML 1 x 25 mL

M-8080-WL-25X-50ML 1 x 50 mL

At stated conc. in Isooctane

M-8080-R2-CAL-SET

All solutions in Isooctane

7 x 1 mL
23 comps.

Components (units in ng/mL)	Level 1	Level 2 (2.5X)	Level 3 (5X)	Level 4 (10X)	Level 5 (25X)	Level 6 (50X)	Level 7 (100X)
Aldrin	2	5	10	20	50	100	200
α-BHC	2	5	10	20	50	100	200
β-BHC	2	5	10	20	50	100	200
γ-BHC	2	5	10	20	50	100	200
δ-BHC	2	5	10	20	50	100	200
α-Chlordane	2	5	10	20	50	100	200
γ-Chlordane	2	5	10	20	50	100	200
4,4'-DDD	4	10	20	40	100	200	400
4,4'-DDE	4	10	20	40	100	200	400
4,4'-DDT	4	10	20	40	100	200	400
Dieldrin	4	10	20	40	100	200	400
Endosulfan I	2	5	10	20	50	100	200
Endosulfan II	4	10	20	40	100	200	400
Endosulfan sulfate	4	10	20	40	100	200	400
Endrin	4	10	20	40	100	200	400
Endrin aldehyde	4	10	20	40	100	200	400
Endrin ketone	4	10	20	40	100	200	400
Heptachlor	2	5	10	20	50	100	200
Heptachlor epoxide	2	5	10	20	50	100	200
Isodrin	2	5	10	20	50	100	200
Methoxychlor	20	50	100	200	500	1,000	2,000
Tetrachloro- <i>m</i> -xylene	2	5	10	20	50	100	200
Decachlorobiphenyl	4	10	20	40	100	200	400

Level 3 Daily QC Working Level CCC (for low level curves)

M-8080-R2-WL-5X-10ML 1 x 10 mL

M-8080-R2-WL-5X-25ML 1 x 25 mL

M-8080-R2-WL-5X-50ML 1 x 50 mL

At stated conc. in Isooctane

Level 4 Daily QC Working Level CCC (for higher level curves)

M-8080-R2-WL-10X-10ML 1 x 10 mL

M-8080-R2-WL-10X-25ML 1 x 25 mL

M-8080-R2-WL-10X-50ML 1 x 50 mL

At stated conc. in Isooctane

Level 5 Daily QC Working Level CCC (for higher level curves)

M-8080-R2-WL-25X-10ML 1 x 10 mL

M-8080-R2-WL-25X-25ML 1 x 25 mL

M-8080-R2-WL-25X-50ML 1 x 50 mL

At stated conc. in Isooctane

Ready-to-Inject

EPA Method 8000 Series

Ready-to-Inject Working Level Standards for Aroclors



Method 8080/8081 Aroclor Calibration Curves

Aroclor 1016/1260 Calibration Curve

C-216/260-CAL-SET

All solutions in Isooctane

Components (units in ng/mL)	Level 1	Level 2 (2X)	Level 3 (5X)	Level 4 (10X)	Level 5 (15X)	Level 6 (20X)
Aroclor 1016	50	100	250	500	750	1000
Aroclor 1260	50	100	250	500	750	1000
Decachlorobiphenyl	10	20	50	100	150	200
Tetrachloro- <i>m</i> -xylene	10	20	50	100	150	200

6 x 1 mL
4 comps.

Level 3 Daily Working Level CCC (for low level curves)

C-216/260-WL-5X-5ML

1 x 5 mL

C-216/260-WL-5X-10ML

1 x 10 mL

At stated conc. in Isooctane

Level 4 Daily Working Level CCC (for higher level curves)

C-216/260-WL-10X-5ML

1 x 5 mL

C-216/260-WL-10X-10ML

1 x 10 mL

At stated conc. in Isooctane

Aroclor 1221 Calibration Curve

C-221-CAL-SET

All solutions in Isooctane

Components (units in ng/mL)	Level 1	Level 2 (2X)	Level 3 (5X)	Level 4 (10X)	Level 5 (15X)	Level 6 (20X)
Aroclor 1221	50	100	250	500	750	1000
Decachlorobiphenyl	10	20	50	100	150	200
Tetrachloro- <i>m</i> -xylene	10	20	50	100	150	200

6 x 1 mL
3 comps.

Level 3 Daily Working Level CCC (for low level curves)

C-221-WL-5X-5ML

1 x 5 mL

C-221-WL-5X-10ML

1 x 10 mL

At stated conc. in Isooctane

Level 4 Daily Working Level CCC (for higher level curves)

C-221-WL-10X-5ML

1 x 5 mL

C-221-WL-10X-10ML

1 x 10 mL

At stated conc. in Isooctane

Aroclor 1232 Calibration Curve

C-232-CAL-SET

All solutions in Isooctane

Components (units in ng/mL)	Level 1	Level 2 (2X)	Level 3 (5X)	Level 4 (10X)	Level 5 (15X)	Level 6 (20X)
Aroclor 1232	50	100	250	500	750	1000
Decachlorobiphenyl	10	20	50	100	150	200
Tetrachloro- <i>m</i> -xylene	10	20	50	100	150	200

6 x 1 mL
3 comps.

Level 3 Daily Working Level CCC (for low level curves)

C-232-WL-5X-5ML

1 x 5 mL

C-232-WL-5X-10ML

1 x 10 mL

At stated conc. in Isooctane

Level 4 Daily Working Level CCC (for higher level curves)

C-232-WL-10X-5ML

1 x 5 mL

C-232-WL-10X-10ML

1 x 10 mL

At stated conc. in Isooctane

Aroclor 1242 Calibration Curve

C-242-CAL-SET

All solutions in Isooctane

Components (units in ng/mL)	Level 1	Level 2 (2X)	Level 3 (5X)	Level 4 (10X)	Level 5 (15X)	Level 6 (20X)
Aroclor 1242	50	100	250	500	750	1000
Decachlorobiphenyl	10	20	50	100	150	200
Tetrachloro- <i>m</i> -xylene	10	20	50	100	150	200

6 x 1 mL
3 comps.

Level 3 Daily Working Level CCC (for low level curves)

C-242-WL-5X-5ML

1 x 5 mL

C-242-WL-5X-10ML

1 x 10 mL

At stated conc. in Isooctane

Level 4 Daily Working Level CCC (for higher level curves)

C-242-WL-10X-5ML

1 x 5 mL

C-242-WL-10X-10ML

1 x 10 mL

At stated conc. in Isooctane

Aroclor 1248 Calibration Curve

C-248-CAL-SET

All solutions in Isooctane

Components (units in ng/mL)	Level 1	Level 2 (2X)	Level 3 (5X)	Level 4 (10X)	Level 5 (15X)	Level 6 (20X)
Aroclor 1248	50	100	250	500	750	1000
Decachlorobiphenyl	10	20	50	100	150	200
Tetrachloro- <i>m</i> -xylene	10	20	50	100	150	200

6 x 1 mL
3 comps.

Level 3 Daily Working Level CCC (for low level curves)

C-248-WL-5X-5ML

1 x 5 mL

C-248-WL-5X-10ML

1 x 10 mL

At stated conc. in Isooctane

Level 4 Daily Working Level CCC (for higher level curves)

C-248-WL-10X-5ML

1 x 5 mL

C-248-WL-10X-10ML

1 x 10 mL

At stated conc. in Isooctane



EPA Method 8000 Series

Ready-to-Inject Working Level Aroclor & GPC Standards

Method 8080/8081 Aroclor Calibration Curves (Continued)

Aroclor 1254 Calibration Curve

C-254-CAL-SET

All solutions in Isooctane

Components (units in ng/mL)	Level 1	Level 2 (2X)	Level 3 (5X)	Level 4 (10X)	Level 5 (15X)	Level 6 (20X)
Aroclor 1254	50	100	250	500	750	1000
Decachlorobiphenyl	10	20	50	100	150	200
Tetrachloro- <i>m</i> -xylene	10	20	50	100	150	200

6 x 1 mL
3 comps.

Level 3 Daily Working Level

CCC (for low level curves)

C-254-WL-5X-5ML

1 x 5 mL

C-254-WL-5X-10ML

1 x 10 mL

At stated conc. in Isooctane

Level 4 Daily Working Level

CCC (for higher level curves)

C-254-WL-10X-5ML

1 x 5 mL

C-254-WL-10X-10ML

1 x 10 mL

At stated conc. in Isooctane

Toxaphene Calibration Curve

P-093-CAL-SET

All solutions in Isooctane

Components (units in ng/mL)	Level 1	Level 2 (2X)	Level 3 (5X)	Level 4 (10X)	Level 5 (15X)	Level 6 (20X)
Toxaphene	50	100	250	500	750	1000
Decachlorobiphenyl	2	4	10	20	30	40
Tetrachloro- <i>m</i> -xylene	2	4	10	20	30	40

6 x 1 mL
3 comps.

Level 3 Daily Working Level

CCC (for low level curves)

P-093-WL-5X-5ML

1 x 5 mL

P-093-WL-5X-10ML

1 x 10 mL

At stated conc. in Isooctane

Level 4 Daily Working Level

CCC (for higher level curves)

P-093-WL-10X-5ML

1 x 5 mL

P-093-WL-10X-10ML

1 x 10 mL

At stated conc. in Isooctane

Chlordane Calibration Curve

P-017-CAL-SET

All solutions in Isooctane

Components (units in ng/mL)	Level 1	Level 2 (2X)	Level 3 (5X)	Level 4 (10X)	Level 5 (15X)	Level 6 (20X)
Chlordane	50	100	250	500	750	1000
Decachlorobiphenyl	20	40	70	100	150	200
Tetrachloro- <i>m</i> -xylene	20	40	70	100	150	200

6 x 1 mL
3 comps.

Level 3 Daily Working Level

CCC (for low level curves)

P-017R-WL-5X-5ML

1 x 5 mL

P-017R-WL-5X-10ML

1 x 10 mL

At stated conc. in Isooctane

Level 4 Daily Working Level

CCC (for higher level curves)

P-017R-WL-10X-5ML

1 x 5 mL

P-017R-WL-10X-10ML

1 x 10 mL

At stated conc. in Isooctane



GPC Standards Sample Clean-up Solutions at Working Level

GPC Calibration Solution

CLP-027-WL-10ML

At stated conc. in CH₂Cl₂

Corn Oil	(25 mg/mL)	Perylene	(0.02 mg/mL)
bis(2-Ethylhexyl)phthalate	(1.0 mg/mL)	Sulfur	(0.08 mg/mL)
Methoxychlor	(0.2 mg/mL)		

1 x 10 mL
5 comps.

Florisol Cartridge Check Solution

CLP-FC-WL-10ML

0.1 µg/mL in Acetone

2,4,5-Trichlorophenol

1 x 10 mL

GPC Calibration Solution for 8/94 SOW OLM03.1

CLP-R27-R2-WL-10ML

At stated conc. in CH₂Cl₂

Corn Oil	(25 mg/mL)	Perylene	(0.02 mg/mL)
bis(2-Ethylhexyl)phthalate	(0.5 mg/mL)	Sulfur	(0.08 mg/mL)
Methoxychlor	(0.1 mg/mL)		

1 x 10 mL
5 comps.

GPC Calibration Check Solutions

GPC-CC-A-WL-10ML

At stated conc. in CH₂Cl₂

Aldrin	(0.1 µg/mL)	Dieldrin	(0.2 µg/mL)
γ-BHC (Lindane)	(0.1 µg/mL)	Endrin	(0.2 µg/mL)
4,4'-DDT	(0.2 µg/mL)	Heptachlor	(0.1 µg/mL)

1 x 10 mL
6 comps.

GPC-CC-B-WL-10ML

0.2 µg/mL each in CH₂Cl₂

Aroclor 1016

Aroclor 1260

1 x 10 mL
2 comps.



Method 8080/8081A/8081B Organochlorine Pesticides by Capillary Column GC/ECD

Single/Dual Column Organochlorine Pesticides

M-8081-SC 1 x 1 mL
M-8081-SC-PAK 5 x 1 mL
 1.0 mg/mL each in Hexane:Toluene (50:50) 20 comps.

SAVE

Aldrin	Dieldrin
α-BHC	Endosulfan I
β-BHC	Endosulfan II
γ-BHC	Endosulfan sulfate
δ-BHC	Endrin
α-Chlordane	Endrin aldehyde
γ-Chlordane	Endrin ketone
4,4'-DDD	Heptachlor
4,4'-DDE	Heptachlor epoxide
4,4'-DDT	Methoxychlor

Technical Note

M-8081A-SC was formulated for use in combination with M-8081-SC when performing single or dual column pesticide analysis. These two product formulations provide the typically analyzed pesticides in one core mixture (M-8081-SC) with the additional 7 analytes (M-8081A-SC) to meet the 27 analytes listed in Method 8081 (January 1995).

Organochlorine Pesticide Mixes

M-8081A-SC 1 x 1 mL
M-8081A-SC-PAK 5 x 1 mL
 1.0 mg/mL each in Hexane:Toluene (50:50) 7 comps.

SAVE

Chlorobenzilate	Hexachlorocyclopentadiene
DBCP	Isodrin
Diallate	Kepone
Hexachlorobenzene	

M-8081A-SC-R 1 x 1 mL
M-8081A-SC-R-PAK 5 x 1 mL
 1.0 mg/mL each in Hexane:Toluene (50:50) 6 comps.

SAVE

Chlorobenzilate	Hexachlorobenzene
1,2-Dibromo-3-chloropropane	Hexachlorocyclopentadiene
Diallate	Isodrin

Dual Column Organochlorine Pesticides

M-8081-DC 1 x 1 mL
 1.0 mg/mL each in Hexane:Toluene (50:50) 22 comps.

Alachlor	Etridiazole
Captan	Hexachlorobenzene
Captan	Hexachlorocyclopentadiene
Chlorobenzilate	Isodrin
Chloroneb	Mirex
Chloropropylate	trans-Nonachlor
Chlorothalonil	PCNB
DBCP	Perthane
DCEA	Propachlor
Diallate	Permethrin * (cis & trans)
Dicofol	Trifluralin

* isomer concentration as stated on certificate of product data

Tailing Test Standard

M-8081-T 1 x 1 mL
 1.0 mg/mL each in Hexane:Toluene (50:50) 4 comps.

Carbophenothion	Kepone
Dichloro	Nitrofen

M-8081-T-R 1 x 1 mL
 1.0 mg/mL each in Hexane:Toluene (50:50) 3 comps.

Carbophenothion	Nitrofen
Dichloro	

Surrogate Standards

CLP-032-R 1 x 1 mL
CLP-032-R-PAK 5 x 1 mL
 0.2 mg/mL each in Acetone 2 comps.

SAVE

Decachlorobiphenyl	Tetrachloro- <i>m</i> -xylene
--------------------	-------------------------------

CLP-034 1 x 1 mL
CLP-034-PAK 5 x 1 mL
 0.2 mg/mL each in Acetone 2 comps.

SAVE

Dibutylchloroendate	Tetrachloro- <i>m</i> -xylene
---------------------	-------------------------------

M-8081-SS-X 1 x 1 mL
M-8081-SS-X-PAK 5 x 1 mL
 1.0 mg/mL in Acetone

SAVE

2-Bromobiphenyl

For Dual Column

M-8081-SS-DC 1 x 1 mL
M-8081-SS-DC-PAK 5 x 1 mL
 1.0 mg/mL in Acetone

SAVE

4-Chloro-3-nitrobenzotrifluoride

Internal Standards

M-8081-IS 1 x 1 mL
M-8081-IS-PAK 5 x 1 mL
 1.0 mg/mL in Acetone

SAVE

Pentachloronitrobenzene (PCNB)

M-8081-IS-X 1 x 1 mL
M-8081-IS-X-PAK 5 x 1 mL
 1.0 mg/mL in Acetone

SAVE

α,α-Dibromo-*m*-xylene

For Dual Column

M-8081-IS-DC 1 x 1 mL
M-8081-IS-DC-PAK 5 x 1 mL
 1.0 mg/mL in Acetone

SAVE

1-Bromo-2-nitrobenzene

Decomposition Standard

M-8081-DS 1 x 1 mL
M-8081-DS-PAK 5 x 1 mL
 0.2 mg/mL each in Hexane 2 comps.

SAVE

4,4'-DDT	Endrin
----------	--------





EPA Method 8000 Series

Method 8082/8082A PCBs by Capillary Column GC by ECD or ELCD

PCB Congeners Mixture

M-8082		1 x 1 mL
M-8082-PAK		5 x 1 mL
100 µg/mL each in Hexane		19 comps.
		SAVE
No.	No.	
1 2-Chlorobiphenyl	137 2,2',3,4,4',5'-Hexachlorobiphenyl	
5 2,3-Dichlorobiphenyl	141 2,2',3,4,5,5'-Hexachlorobiphenyl	
18 2,2',5-Trichlorobiphenyl	151 2,2',3,5,5',6'-Hexachlorobiphenyl	
31 2,4',5-Trichlorobiphenyl	153 2,2',4,4',5,5'-Hexachlorobiphenyl	
44 2,2',3,5'-Tetrachlorobiphenyl	170 2,2',3,3',4,4',5'-Heptachlorobiphenyl	
52 2,2',5,5'-Tetrachlorobiphenyl	180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	
66 2,3',4,4'-Tetrachlorobiphenyl	183 2,2',3,4,4',5',6'-Heptachlorobiphenyl	
87 2,2',3,4,5'-Pentachlorobiphenyl	187 2,2',3,4',5,5',6'-Heptachlorobiphenyl	
101 2,2',4,5,5'-Pentachlorobiphenyl	206 2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl	
110 2,3,3',4',6-Pentachlorobiphenyl		

Reformulated PCB Congeners Mixture

M-8082A		1 x 1 mL
M-8082A-PAK		5 x 1 mL
100 µg/mL each in Hexane		19 comps.
		SAVE
No.	No.	
1 2-Chlorobiphenyl	138 2,2',3,4,4',5'-Hexachlorobiphenyl	
5 2,3-Dichlorobiphenyl	141 2,2',3,4,5,5'-Hexachlorobiphenyl	
18 2,2',5-Trichlorobiphenyl	151 2,2',3,5,5',6'-Hexachlorobiphenyl	
31 2,4',5-Trichlorobiphenyl	153 2,2',4,4',5,5'-Hexachlorobiphenyl	
44 2,2',3,5'-Tetrachlorobiphenyl	170 2,2',3,3',4,4',5'-Heptachlorobiphenyl	
52 2,2',5,5'-Tetrachlorobiphenyl	180 2,2',3,4,4',5,5'-Heptachlorobiphenyl	
66 2,3',4,4'-Tetrachlorobiphenyl	183 2,2',3,4,4',5',6'-Heptachlorobiphenyl	
87 2,2',3,4,5'-Pentachlorobiphenyl	187 2,2',3,4',5,5',6'-Heptachlorobiphenyl	
101 2,2',4,5,5'-Pentachlorobiphenyl	206 2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl	
110 2,3,3',4',6-Pentachlorobiphenyl		

Technical Note

AccuStandard has formulated these standards for use in determining the concentrations of Aroclors (Industrial PCBs), specific PCB congeners, or "total PCBs". Additional Aroclor stock solutions are available at higher concentrations and in other solvents.

Internal and Surrogate Standard

CLP-032-H-5X		1 x 1 mL
1.0 mg/mL each in Hexane		2 comps.
Decachlorobiphenyl	Tetrachloro- <i>m</i> -xylene	

Surrogate Standards

M-8082-SSA-WL-10ML		1 x 10 mL
M-8082-SSA-WL-10ML-PAK		5 x 10 mL
5 µg/mL in Acetone		
		SAVE
Decachlorobiphenyl		
M-8082-SS		1 x 1 mL
100 µg/mL in Hexane		
M-8082-SS-10X		1 x 1 mL
1.0 mg/mL in Hexane		
Tetrachloro- <i>m</i> -xylene		

Internal Standards

M-8082-ISC-WL-10ML		1 x 10 mL
M-8082-ISC-WL-10ML-PAK		5 x 10 mL
5 µg/mL in Hexane		
		SAVE
Decachlorobiphenyl		
M-8082-SSC-WL-10ML		1 x 10 mL
M-8082-SSC-WL-10ML-PAK		5 x 10 mL
5 µg/mL in Acetone		
		SAVE
Tetrachloro- <i>m</i> -xylene		

Method 8082 Aroclor 1016/1260 Calibration Curve

Aroclor 1016/1260 Calibration Curve

C-216/260-CAL-SET		6 x 1 mL
All solutions in Isooctane		4 comps.
Components (units in ng/mL)	Level 1	Level 2 (2X)
Aroclor 1016	50	100
Aroclor 1260	50	100
Decachlorobiphenyl	10	20
Tetrachloro- <i>m</i> -xylene	10	20
	Level 3 (5X)	Level 4 (10X)
	250	500
	250	500
	50	100
	100	150
	Level 5 (15X)	Level 6 (20X)
	750	1000
	750	1000
	150	200
	150	200

Level 3 Daily Working Level

CCC (for low level curves)

C-216/260-WL-5X-5ML	1 x 5 mL
C-216/260-WL-5X-10ML	1 x 10 mL
At stated conc. in Isooctane	

Level 4 Daily Working Level

CCC (for higher level curves)

C-216/260-WL-10X-5ML	1 x 5 mL
C-216/260-WL-10X-10ML	1 x 10 mL
At stated conc. in Isooctane	

Method 8082A Polychlorinated Biphenyl (PCBs) by GC/ECD

Individual PCB Congener Solutions

Congener	35 µg/mL in Isooctane	100 µg/mL in Isooctane	1 mL
2-Chlorobiphenyl	C-001S	C-001S-TP	
2,3-Dichlorobiphenyl	C-005S	C-005S-TP	
2,2',5-Trichlorobiphenyl	C-018S	C-018S-TP	
2,4',5-Trichlorobiphenyl	C-031S	C-031S-TP	
2,2',3,5'-Tetrachlorobiphenyl	C-044S	C-044S-TP	
2,2',5,5'-Tetrachlorobiphenyl	C-052S	C-052S-TP	
2,3',4,4'-Tetrachlorobiphenyl	C-066S	C-066S-TP	
2,2',3,4,5'-Pentachlorobiphenyl	C-087S	C-087S-TP	
2,2',4,5,5'-Pentachlorobiphenyl	C-101S	C-101S-TP	
2,3,3',4',6-Pentachlorobiphenyl	C-110S	C-110S-TP	
2,2',3,4,4',5'-Hexachlorobiphenyl	C-137S	C-137S-TP	
2,2',3,4,4',5'-Hexachlorobiphenyl	C-138S	C-138S-TP	
2,2',3,4,5,5'-Hexachlorobiphenyl	C-141S	C-141S-TP	
2,2',3,5,5',6'-Hexachlorobiphenyl	C-151S	C-151S-TP	
2,2',4,4',5,5'-Hexachlorobiphenyl	C-153S	C-153S-TP	
2,2',3,3',4,4',5'-Heptachlorobiphenyl	C-170S	C-170S-TP	
2,2',3,4,4',5,5'-Heptachlorobiphenyl	C-180S	C-180S-TP	
2,2',3,4,4',5',6'-Heptachlorobiphenyl	C-183S	C-183S-TP	
2,2',3,4',5,5',6'-Heptachlorobiphenyl	C-187S	C-187S-TP	
2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl	C-206S	C-206S-TP	

Internal Standards

C-209S-H		1 x 1 mL
100 µg/mL in Hexane		
C-209S-H-10X		1 x 1 mL
1.0 mg/mL in Hexane		
Decachlorobiphenyl		

Internal and Surrogate Standard

CLP-032-H-5X		1 x 1 mL
1.0 mg/mL each in Hexane		2 comps.
Decachlorobiphenyl	Tetrachloro- <i>m</i> -xylene	

Surrogate Standard

M-8082-SS		1 x 1 mL
100 µg/mL in Hexane		
M-8082-SS-10X		1 x 1 mL
1.0 mg/mL in Hexane		
Tetrachloro- <i>m</i> -xylene		



Method 8085 Pesticides by GC/AED

Nitrogen Containing Pesticides

Mix #1

M-8085-N1

At stated conc. in MtBE

1 x 5 mL
20 comps.

Alachlor	(18 µg/mL)	Norflurazon	(10 µg/mL)
Atrazine	(5 µg/mL)	Oxyfluorfen	(20 µg/mL)
Bromacil	(20 µg/mL)	Pendimethalin	(7.5 µg/mL)
Dichlobenil	(10 µg/mL)	Prometryne	(5 µg/mL)
Diphenamid	(15 µg/mL)	Pronamide	(20 µg/mL)
Ethalfuralin	(7.5 µg/mL)	Propachlor	(12 µg/mL)
Fluridone	(30 µg/mL)	Simazine	(5 µg/mL)
Metolachlor	(20 µg/mL)	Tebuthiuron	(7.5 µg/mL)
Metribuzin	(5 µg/mL)	Terbacil	(15 µg/mL)
Napropamide	(15 µg/mL)	Trifluralin	(7.5 µg/mL)

Mix #2

M-8085-N2

At stated conc. in MtBE

1 x 5 mL
18 comps.

Ametryn	(5 µg/mL)	Molinate	(10 µg/mL)
Benfluralin	(7.5 µg/mL)	Prebane	(5 µg/mL)
Butylate	(10 µg/mL)	Profluralin	(12 µg/mL)
Chlorpropham	(20 µg/mL)	Prometon	(5 µg/mL)
Chlorothalonil	(12 µg/mL)	Propargite	(10 µg/mL)
Cyanazine	(7.5 µg/mL)	Propazine	(5 µg/mL)
Cycloate	(10 µg/mL)	Tillam	(10 µg/mL)
EPTC	(10 µg/mL)	Triallate	(13 µg/mL)
Hexazinone	(7.5 µg/mL)	Vernolate	(10 µg/mL)

Mix #3

M-8085-N3

At stated conc. in MtBE

1 x 5 mL
15 comps.

Butachlor	(30 µg/mL)	Metalaxyl	(30 µg/mL)
Carboxin	(30 µg/mL)	MGK-264	(40 µg/mL)
Diallate	(35 µg/mL)	cis-Permethrin	(10 µg/mL)
Fenarimol	(15 µg/mL)	Resmethrin	(10 µg/mL)
Fenvalerate	(20 µg/mL)	Sumithrin	(10 µg/mL)
Gesatamine	(7.5 µg/mL)	Triadimefon	(13 µg/mL)
Hexazinone	(7.5 µg/mL)	Triallate	(15 µg/mL)
Karmex	(30 µg/mL)		

Technical Note

These standards are for those laboratories participating in the analysis of pesticides by EPA Method 8085 Pesticide Screening and Compound Independent Elemental Quantitation by Gas Chromatography with Atomic Emission Detection (AED).

Chlorinated Pesticides

Mix #1

M-8085-C1

2.5 µg/mL each in Hexane

1 x 5 mL
23 comps.

Aldrin	p,p'-DDE	Endrin ketone
α-BHC	p,p'-DDT	Heptachlor
β-BHC	Dieldrin	Heptachlor epoxide (Isomer B)
γ-BHC	Endosulfan I	Methoxychlor
δ-BHC	Endosulfan II	cis-nonachlor
γ-Chlordane	Endosulfan sulfate	Oxychlordane
α-Chlordane	Endrin	Pentachloroanisole
p,p'-DDD	Endrin aldehyde	

Mix #2

M-8085-C2

At stated conc. in Hexane

1 x 5 mL
9 comps.

Captan	(6.75 µg/mL)	Hexachlorobenzene	(2.5 µg/mL)
Captafol	(12.5 µg/mL)	Kelthane	(10 µg/mL)
o,p'-DDE	(2.5 µg/mL)	Mirex	(2.5 µg/mL)
o,p'-DDD	(2.5 µg/mL)	trans-Nonachlor	(2.5 µg/mL)
o,p'-DDT	(2.5 µg/mL)		

Organo Phosphorous Pesticides

Mix #1

M-8085-P1

At stated conc. in MtBE

1 x 5 mL
14 comps.

Azinphos ethyl	(8 µg/mL)	EPN	(5 µg/mL)
Carbophenothion	(5 µg/mL)	Ethion	(3.5 µg/mL)
Chlorpyrifos methyl ester	(4 µg/mL)	Fenamiphos	(5 µg/mL)
Demeton (mixed isomers)	(7 µg/mL)	Fenitrothion	(3.5 µg/mL)
Disulfoton	(3 µg/mL)	Malathion	(4 µg/mL)
Dursban	(4 µg/mL)	Merphos	(6 µg/mL)
Dyfonate	(3 µg/mL)	Sulfotep	(3 µg/mL)

Mix #2

M-8085-P2

At stated conc. in MtBE

1 x 5 mL
12 comps.

Azinphos methyl	(8 µg/mL)	Fenthion	(3.5 µg/mL)
Bolstar	(3.5 µg/mL)	Imidan	(5.5 µg/mL)
Diazinon	(4 µg/mL)	Methyl parathion	(3.5 µg/mL)
Dimethoate	(4 µg/mL)	Parathion	(4 µg/mL)
Ethoprop	(4 µg/mL)	Phorate	(3.5 µg/mL)
Fensulfthion	(5 µg/mL)	Ronnel	(3.5 µg/mL)

Herbicides as Methyl Derivatives

Mix #1

M-8085-H1-M

At stated conc. in MtBE

1 x 5 mL
13 comps.

Acifluorfen methyl ester	(20 µg/mL)	4-Nitroanisole	(10 µg/mL)
Bentazon methyl ester	(7.5 µg/mL)	Pentachloroanisole	(2.5 µg/mL)
Bromoxynil methyl ether	(5 µg/mL)	2,3,4,5-Tetrachloroanisole	(2.75 µg/mL)
Chloramben methyl ester	(5 µg/mL)	2,3,4,6-Tetrachloroanisole	(2.75 µg/mL)
Dinoseb methyl ether	(7.5 µg/mL)	2,4,5-Trichloroanisole	(3 µg/mL)
MCPA methyl ester	(10 µg/mL)	2,4,6-Trichloroanisole	(3 µg/mL)
MCPP methyl ester	(10 µg/mL)		

Mix #2

M-8085-H2-M

At stated conc. in MtBE

1 x 5 mL
13 comps.

Dalapon methyl ester	(4 µg/mL)	Ioxynil methyl ether	(5 µg/mL)
2,4-D methyl ester	(5 µg/mL)	Methyl 3,5-Dichlorobenzoate	(5 µg/mL)
2,4-DB methyl ester	(6 µg/mL)	Picloram methyl ester	(5 µg/mL)
DCPA methyl ester	(4 µg/mL)	Silvex methyl ester	(4 µg/mL)
Dicamba methyl ester	(5 µg/mL)	2,4,5-T methyl ester	(4 µg/mL)
Dichloroprop methyl ester	(5.5 µg/mL)	Triclopyr methyl ester	(4 µg/mL)
Diclofop methyl	(7.5 µg/mL)		

Surrogates

M-8085-PEST-SS

At stated conc. in MtBE

1 x 5 mL
4 comps.

Decachlorobiphenyl	(10 µg/mL)	1,3-Dimethyl-2-nitrobenzene	(20 µg/mL)
4,4'-Dibromooctafluorobiphenyl	(20 µg/mL)	Triphenylphosphate	(20 µg/mL)

Technical Note

Organophosphorus and Nitrogen/Phosphorus pesticides are light sensitive, store in deactivated amber vials.

Method 8085 continued
on next page



EPA Method 8000 Series

Method 8085 (Continued) Pesticides by GC/AED

Alternate Surrogates

M-8085-PEST-SS2 1 x 5 mL
20 µg/mL each in MtBE 2 comps.

Dibutylchloroendate TCMX

Herbicide Surrogate

M-8085-HERB-SS 1 x 5 mL
20 µg/mL in MtBE

2,4,6-Tribromophenol

Compound Independent Calibration (CIC) Mix

M-8085-CIC 1 x 5 mL
At stated conc. in MtBE 15 comps.

Decachlorobiphenyl (492 ng/mL)	Pentachloronitrobenzene (1690 ng/mL)
Diazinon (9800 ng/mL)	Phorate (2100 ng/mL)
4,4'-Dibromooctafluorobiphenyl (1000 ng/mL)	Silvex methyl ester (400 ng/mL)
Dichlobenil (6140 ng/mL)	Terbufos (7600 ng/mL)
Dursban (5680 ng/mL)	2,4,6-Tribromoanisole (2870 ng/mL)
Ethoprop (391 ng/mL)	1,2,3-Trichlorobenzene (6810 ng/mL)
Ioxynil methyl ether (500 ng/mL)	Trifluralin (16000 ng/mL)
Malathion (1070 ng/mL)	

Method 8090 Nitroaromatics & Isophorone by GC/TCD or FID

Analyte Calibration Set (609)

M-609-10X-SET set of 2 x 1 mL
(M-609A-10X, M-609B-10X)

M-609A-10X 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

Isophorone Nitrobenzene

M-609B-10X 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

2,4-Dinitrotoluene 2,6-Dinitrotoluene

M-609-QC 1 x 1 mL
At stated conc. in Acetone 4 comps.

Isophorone (100 µg/mL)	2,6-Dinitrotoluene (20 µg/mL)
2,4-Dinitrotoluene (20 µg/mL)	Nitrobenzene (100 µg/mL)

Analyte Calibration Set (8090)

M-8090-10X-SET set of 2 x 1 mL
(M-8090-10X, M-609B-10X)

M-8090-10X 1 x 1 mL
2.0 mg/mL each in MeOH 4 comps.

1,3-Dinitrobenzene	1,4-Naphthoquinone
Isophorone	Nitrobenzene

M-609B-10X 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

2,4-Dinitrotoluene 2,6-Dinitrotoluene

M-8090-QC 1 x 1 mL
At stated conc. in Acetone 6 comps.

1,3-Dinitrobenzene (40 µg/mL)	Isophorone (100 µg/mL)
2,4-Dinitrotoluene (20 µg/mL)	1,4-Naphthoquinone (40 µg/mL)
2,6-Dinitrotoluene (20 µg/mL)	Nitrobenzene (100 µg/mL)

Method 8091 Nitroaromatics & Cyclic Ketones by GC/ECD or NPD

RCRA Analytes

M-8091 1 x 1 mL
1.0 mg/mL each in Isooctane:Toluene (50:50) 6 comps.

1,4-Dinitrobenzene	1,4-Naphthoquinone
2,4-Dinitrotoluene	Nitrobenzene
2,6-Dinitrotoluene	Pentachloronitrobenzene

Chloronitroaromatics: non-RCRA Analytes

M-8091-X1 1 x 1 mL
1.0 mg/mL each in Isooctane 17 comps.

1-Chloro-2,4-dinitrobenzene	3,5-Dichloronitrobenzene
1-Chloro-3,4-dinitrobenzene	3,4-Dichloronitrobenzene
1-Chloro-2-nitrobenzene	2,5-Dichloronitrobenzene
1-Chloro-4-nitrobenzene	2,3,5,6-Tetrachloronitrobenzene
2-Chloro-6-nitrotoluene	2,3,4,5-Tetrachloronitrobenzene
4-Chloro-2-nitrotoluene	1,2,3-Trichloro-4-nitrobenzene
4-Chloro-3-nitrotoluene	1,2,4-Trichloro-5-nitrobenzene
2,3-Dichloronitrobenzene	2,4,6-Trichloronitrobenzene
2,4-Dichloronitrobenzene	

Internal Standard

M-8091-IS-20X 1 x 1 mL
M-8091-IS-20X-PAK 5 x 1 mL
1.0 mg/mL in Acetone **SAVE**

Hexachlorobenzene

Surrogate Standard

M-8091-SS-100X 1 x 1 mL
M-8091-SS-100X-PAK 5 x 1 mL
1.0 mg/mL in Acetone **SAVE**

1-Chloro-3-nitrobenzene

Buy AccuPAKs™
Save 20-40% 5 x 1 mL





Method 8095 Explosives by GC/ECD

This method is a companion to EPA Method 8330 found later in this section. Utilizing the sensitivity and selectivity of the ECD as well as the resolution capabilities of capillary columns allows the chemist to quantitatively analyze for the typical explosives. The method uses familiar extraction techniques which reduce sample preparation time.

Explosive Stock Solution A

M-8095-SSA-100X 1 x 1 mL
M-8095-SSA-100X-PAK 5 x 1 mL
 100 µg/mL each in AcCN:MeOH (50:50) 10 comps.

2-Amino-4,6-dinitrotoluene	1,3,5-Trinitrobenzene
4-Amino-2,6-dinitrotoluene	TNT
1,3-Dinitrobenzene	RDX
2,6-Dinitrotoluene	Tetryl
2,4-Dinitrotoluene	HMX

Explosive Stock Solution B

M-8095-SSB-100X 1 x 1 mL
M-8095-SSB-100X-PAK 5 x 1 mL
 At stated conc. in AcCN:MeOH (50:50) 7 comps.

Nitrobenzene (500 µg/mL)	Nitroglycerin (500 µg/mL)
3-Nitrotoluene (500 µg/mL)	PETN (500 µg/mL)
2-Nitrotoluene (500 µg/mL)	3,5-Dinitroaniline (100 µg/mL)
4-Nitrotoluene (500 µg/mL)	

Explosive Surrogate Standards

M-8095-SS-01 1 x 1 mL
M-8095-SS-01-PAK 5 x 1 mL
 100 µg/mL in AcCN

3,4-Dinitrotoluene

M-8095-SS-02 1 x 1 mL
M-8095-SS-02-PAK 5 x 1 mL
 100 µg/mL in AcCN

2-Methyl-4-nitroaniline

M-8095-SS-03 1 x 1 mL
M-8095-SS-03-PAK 5 x 1 mL
 100 µg/mL in AcCN

2,5-Dinitrotoluene

Method 8100 PAHs by GC/FID

Polynuclear Aromatic Hydrocarbon Mix

Z-014G-R 1 x 1 mL
Z-014G-R-PAK 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂:Benzene (50:50) 17 comps.

Acenaphthene	Chrysene
Acenaphthylene	Dibenz[a,h]anthracene
Anthracene	Fluoranthene
Benz[a]anthracene	Fluorene
Benzo[a]pyrene	Indeno[1,2,3-cd]pyrene
Benzo[b]fluoranthene	Naphthalene
Benzo[g,h,i]perylene	Phenanthrene
Benzo[k]fluoranthene	Pyrene
Carbazole	

PAH Additions to Method 8100 by GC/FID

M-8100-R 1 x 1 mL
 1.0 mg/mL each in CH₂Cl₂ 8 comps.

Benzo[j]fluoranthene	Dibenzo[a,e]pyrene
Dibenz[a,h]acridine	Dibenzo[a,h]pyrene
Dibenz[a,i]acridine	Dibenzo[a,i]pyrene
7H-Dibenzo[c,g]carbazole	3-Methylcholanthrene

PAH QC Mix

M-8100-QC 1 x 1 mL
M-8100-QC-PAK 5 x 1 mL
 At stated conc. in AcCN 24 comps.

Acenaphthene (100 µg/mL)	Dibenz[a,h]anthracene (10 µg/mL)
Acenaphthylene (100 µg/mL)	7H-Dibenzo[c,g]carbazole (10 µg/mL)
Anthracene (100 µg/mL)	Dibenzo[a,e]pyrene (10 µg/mL)
Benz[a]anthracene (10 µg/mL)	Dibenzo[a,h]pyrene (10 µg/mL)
Benzo[b]fluoranthene (10 µg/mL)	Dibenzo[a,i]pyrene (10 µg/mL)
Benzo[j]fluoranthene (10 µg/mL)	Fluoranthene (10 µg/mL)
Benzo[k]fluoranthene (5 µg/mL)	Fluorene (100 µg/mL)
Benzo[g,h,i]perylene (10 µg/mL)	Indeno[1,2,3-cd]pyrene (10 µg/mL)
Benzo[a]pyrene (10 µg/mL)	3-Methylcholanthrene (10 µg/mL)
Chrysene (10 µg/mL)	Naphthalene (100 µg/mL)
Dibenz[a,h]acridine (10 µg/mL)	Phenanthrene (100 µg/mL)
Dibenz[a,i]acridine (10 µg/mL)	Pyrene (10 µg/mL)

Surrogate Standard

M-8100-SS 1 x 1 mL
M-8100-SS-PAK 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂ 2 comps.

2-Fluorobiphenyl	1-Fluoronaphthalene
------------------	---------------------

Method 8110 Haloethers by GC/FID

Haloethers

M-611-10X 1 x 1 mL
 2.0 mg/mL each in MeOH 5 comps.

4-Bromophenyl phenyl ether	bis(2-Chloro-1-methylethyl) ether
bis(2-Chloroethoxy)methane	4-Chlorophenyl phenyl ether
bis(2-Chloroethyl) ether	



EPA Method 8000 Series

Method 8111 Haloethers Mix: non-RCRA Analytes

Haloethers Mix

M-8111-X1 1 x 1 mL
1.0 mg/mL each in Isooctane 19 comps.
Individual products each at 1.0 mg/mL in Isooctane

Compound	Cat.No.	1 mL
4-Bromophenyl phenyl ether	E-001S	
2-Chlorophenyl-4-nitrophenyl ether	E-005S	
3-Chlorophenyl-4-nitrophenyl ether	E-006S	
4-Chlorophenyl-4-nitrophenyl ether	E-007S	
2,4-Dibromophenyl-4-nitrophenyl ether	E-004S	
2,4-Dichlorophenyl-3-methyl-4-nitrophenyl ether	E-020S	
2,6-Dichlorophenyl-4-nitrophenyl ether	E-011S	
3,5-Dichlorophenyl-4-nitrophenyl ether	E-012S	
2,5-Dichlorophenyl-4-nitrophenyl ether	E-010S	
2,4-Dichlorophenyl-4-nitrophenyl ether	E-009S	
2,3-Dichlorophenyl-4-nitrophenyl ether	E-008S	
3,4-Dichlorophenyl-4-nitrophenyl ether	E-013S	
4-Nitrophenyl phenyl ether	E-003S	
2,4,6-Trichlorophenyl-4-nitrophenyl ether	E-018S	
2,3,6-Trichlorophenyl-4-nitrophenyl ether	E-016S	
2,3,5-Trichlorophenyl-4-nitrophenyl ether	E-015S	
2,4,5-Trichlorophenyl-4-nitrophenyl ether	E-017S	
3,4,5-Trichlorophenyl-4-nitrophenyl ether	E-019S	
2,3,4-Trichlorophenyl-4-nitrophenyl ether	E-014S	

Haloethers Mix: RCRA Analytes

M-8111 1 x 1 mL
M-8111-PAK **SAVE** 5 x 1 mL
1.0 mg/mL each in Isooctane 4 comps.

bis(2-chloroethoxy)methane bis(2-Chloro-1-methylethyl) ether
bis(2-Chloroethyl) ether 4-Chlorophenyl phenyl ether

Internal Standard

M-8111-IS-20X 1 x 1 mL
M-8111-IS-20X-PAK **SAVE** 5 x 1 mL
1,000 µg/mL in Acetone
4,4'-Dibromobiphenyl

Surrogate Standard

M-8111-SS-50X 1 x 1 mL
1,000 µg/mL each in Acetone 2 comps.
2,4-Dichlorophenyl phenyl ether 2,3,4-Trichlorophenyl phenyl ether

Method 8120 & 8120A Chlorinated Hydrocarbons by GC/ECD

Chlorinated Hydrocarbons

M-8120 1 x 1 mL
2.0 mg/mL each in Hexane 10 comps.
Individuals each in 2.0 mg/mL each in Hexane **NEW**

Compound	Cat.No.	1 mL
2-Chloronaphthalene	M-8120-01	
1,2-Dichlorobenzene	M-8120-02	
1,3-Dichlorobenzene	M-8120-03	
1,4-Dichlorobenzene	M-8120-04	
Hexachlorobenzene	M-8120-05	
Hexachlorobutadiene	M-8120-06	
Hexachlorocyclopentadiene	M-8120-07	
Hexachloroethane	M-8120-08	
1,2,4,5-Tetrachlorobenzene	M-8120-09	
1,2,4-Trichlorobenzene	M-8120-10	

Performance Check Solution

M-8120-QC 1 x 1 mL
At stated conc. in Acetone 10 comps.

2-Chloronaphthalene(1.0 mg/mL) Hexachlorobutadiene (0.1 mg/mL)
1,2-Dichlorobenzene(1.0 mg/mL) Hexachlorocyclopentadiene (0.1 mg/mL)
1,3-Dichlorobenzene(1.0 mg/mL) Hexachloroethane (0.1 mg/mL)
1,4-Dichlorobenzene(1.0 mg/mL) 1,2,4,5-Tetrachlorobenzene (1.0 mg/mL)
Hexachlorobenzene(0.1 mg/mL) 1,2,4-Trichlorobenzene (1.0 mg/mL)

Method 8121 Chlorinated Hydrocarbons by GC/ECD

Chlorinated Hydrocarbons

M-8121 1 x 1 mL
1.0 mg/mL each in Hexane 22 comps.

Benzal chloride Hexachlorobenzene
Benzotrichloride Hexachlorobutadiene
Benzyl chloride Hexachlorocyclopentadiene
α-BHC Hexachloroethane
β-BHC Pentachlorobenzene
γ-BHC 1,2,3,4-Tetrachlorobenzene
δ-BHC 1,2,3,5-Tetrachlorobenzene
2-Chloronaphthalene 1,2,4,5-Tetrachlorobenzene
1,2-Dichlorobenzene 1,2,3-Trichlorobenzene
1,3-Dichlorobenzene 1,2,4-Trichlorobenzene
1,4-Dichlorobenzene 1,3,5-Trichlorobenzene

Internal Standards

M-8121-IS 1 x 1 mL
M-8121-IS-PAK **SAVE** 5 x 1 mL
50 µg/mL in Acetone
1,3,5-Tribromobenzene

M-8121-IS-M 1 x 1 mL
M-8121-IS-M-PAK **SAVE** 5 x 1 mL
50 µg/mL each in Acetone 3 comps.
2,5-Dibromotoluene 1,3,5-Tribromobenzene
α,α'-Dibromo-*m*-xylene

Surrogate Standard

M-8121-SS 1 x 1 mL
M-8121-SS-PAK **SAVE** 5 x 1 mL
At stated conc. in Acetone 3 comps.
1,4-Dichloronaphthalene (1 µg/mL) α,2,6-Trichlorotoluene (10 µg/mL)
2,3,4,5,6-Pentachlorotoluene (1 µg/mL)

Varied Concentration QC Mix

M-8121-QC 1 x 1 mL
At stated conc. in Hexane 22 comps.
Benzal chloride (100 µg/mL) Hexachlorobenzene (10 µg/mL)
Benzotrichloride (100 µg/mL) Hexachlorobutadiene (10 µg/mL)
Benzyl chloride (100 µg/mL) Hexachlorocyclopentadiene (10 µg/mL)
α-BHC (100 µg/mL) Hexachloroethane (10 µg/mL)
β-BHC (100 µg/mL) Pentachlorobenzene (10 µg/mL)
γ-BHC (100 µg/mL) 1,2,3,4-Tetrachlorobenzene (100 µg/mL)
δ-BHC (100 µg/mL) 1,2,3,5-Tetrachlorobenzene (100 µg/mL)
2-Chloronaphthalene (2,000 µg/mL) 1,2,4,5-Tetrachlorobenzene (100 µg/mL)
1,2-Dichlorobenzene (1,000 µg/mL) 1,2,3-Trichlorobenzene (100 µg/mL)
1,3-Dichlorobenzene (1,000 µg/mL) 1,2,4-Trichlorobenzene (100 µg/mL)
1,4-Dichlorobenzene (1,000 µg/mL) 1,3,5-Trichlorobenzene (100 µg/mL)

Method 8131 Aniline & Selected Derivatives by GC/NPD, GC/AFD, GC/TSD

Aniline & Selected Derivatives

M-8131 1 x 1 mL
1.0 mg/mL each in Toluene 19 comps.

Aniline 2,6-Dibromo-4-nitroaniline
4-Bromoaniline 3,4-Dichloroaniline
2-Bromo-6-chloro-4-nitroaniline 2,6-Dichloro-4-nitroaniline
2-Bromo-4,6-dinitroaniline 2,4-Dinitroaniline
2-Chloroaniline 2-Nitroaniline
3-Chloroaniline 3-Nitroaniline
4-Chloroaniline 4-Nitroaniline
2-Chloro-4,6-dinitroaniline 2,4,6-Trichloroaniline
2-Chloro-4-nitroaniline 2,4,5-Trichloroaniline
4-Chloro-2-nitroaniline



Method 8140 Organophosphorous Pesticides by GC/NPD/ELCD/FPD

Organophosphorous Pesticides

M-8140M		1 x 1 mL
M-8140M-PAK	SAVE	5 x 1 mL
0.04 mg/mL each in Hexane		
M-8140M-5X *		1 x 1 mL
M-8140M-5X-PAK *	SAVE	5 x 1 mL
0.2 mg/mL each in Hexane:Acetone (95:5)		
20 comps.		
Azinphosmethyl (<i>Guthion</i>) (01)	Diazinon (06)	
Bolstar (02)	Dichlorovos (07)	
Chlorpyrifos (03)	Disulfoton (<i>Di-Syston</i>) (08)	
Coumaphos (04)	Ethoprop (09)	
Demeton (05)	Fensulfothion (10)	

Organophosphorous Pesticide Set

M-8140-SET	20 x 1 mL
Individual solutions listed below, each at 1.0 mg/mL in Hexane	

Fenthion (11)	Phorate (<i>Thimet</i>) (16)
Merphos (12)	Ronnel (17)
Methyl parathion (13)	Stirophos (18)
Mevinphos (<i>Phosdrin</i>) (14)	Tokuthion (19)
Naled (<i>Dibrom</i>) (15)	Trichloronate (<i>Agritox</i>) (20)

Method 8141A Additions to Method 8140 Organophosphorus Pesticides by GC/NPD

Mix #1

M-8141M *		1 x 1 mL
M-8141M-PAK *	SAVE	5 x 1 mL
Mixture, 0.2 mg/mL each in Hexane		
7 comps.		
M-8141-SET		7 x 1 mL
Individual solutions, Each at 1.0 mg/mL in Hexane, Dimethoate is in Hexane:Acetone (90:10)		

Compound	Cat. No.	1 mL
Dimethoate	M-8141-01	
EPN	M-8141-02	
Malathion	M-8141-03	
Monocrotophos	M-8141-04	
Ethyl parathion	M-8141-05	
Sulfotep	M-8141-06	
TEPP	M-8141-07	

Technical Note

Tetraethyl pyrophosphate TEPP is unstable, decomposes in water, and is thermally labile at inlet temperatures above 170°C.

Mix #2

M-8141A-1M	1 x 1 mL
Mixture, 0.2 mg/mL each in Hexane	
10 comps.	
M-8141A-1-SET *	10 x 1 mL
Individual solutions, Each at 1.0 mg/mL in Hexane	

Compound	Cat. No.	1 mL
Azinphos ethyl	M-8141A-1-01	
Carbophenothion	M-8141A-1-02	
Chlorfenvinphos	M-8141A-1-03	
Dioxathion	M-8141A-1-04 *	
Ethion	M-8141A-1-05	
Famphur	M-8141A-1-06	
Leptophos	M-8141A-1-07	
Phosmet	M-8141A-1-08	
Phosphamidon	M-8141A-1-09 *	
Terbufos	M-8141A-1-10	

Mix #3

M-8141A-2M	1 x 1 mL
Mixture, 0.2 mg/mL each in Hexane	
9 comps.	
M-8141A-2-SET	9 x 1 mL
Individual solutions, Each at 1.0 mg/mL in Hexane	

Aspon (01)	Fenitrothion (06)
Chlorpyrifos methyl ester (02)	Fonophos (07)
Crotoxyphos (03)	Thionazin (08)
Dichlofenthion (04)	Trichlorfon (09)
Dicrotophos (05)	

Internal Standard for NPD

M-8141A-IS		1 x 1 mL
M-8141A-IS-PAK	SAVE	5 x 1 mL
1.0 mg/mL in Acetone		
1-Bromo-2-nitrobenzene		

Industrial Chemicals & Triazine Herbicides

M-8141A-IC	1 x 1 mL
0.2 mg/mL each in Hexane	
2 comps.	
Hexamethylphosphoramide (<i>HMPA</i>)	Tri-o-cresylphosphate (<i>TOCP</i>)

M-8141A-TH		1 x 1 mL
M-8141A-TH-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in Acetone		
2 comps.		
Atrazine	Simazine	

M-8141B-HSD		1 x 1 mL
M-8141B-HSD-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in Hexane		
9 comps.		

Chlorpyrifos	Ronnel
Coumaphos	Stirophos
Dichlorvos	Trichloronate
EPN	Tokuthion
Naled	

Technical Note

For use with a halogen-specific detector (i.e., electrolytic conductivity or microcoulometry). ECD should only be used when previous analyses have demonstrated that interferences do not adversely affect quantitation.

Surrogate Standard for NPD & FPD

M-8141A-SS		1 x 1 mL
M-8141A-SS-PAK	SAVE	5 x 1 mL
1.0 mg/mL each in Acetone		
2 comps.		
Tributylphosphate	Triphenylphosphate	

Surrogate Standard for NPD only

M-8141A-SS-X		1 x 1 mL
M-8141A-SS-X-PAK	SAVE	5 x 1 mL
1.0 mg/mL in Acetone		

4-Chloro-3-nitrobenzotrifluoride

Technical Note

Organophosphorus and Nitrogen/Phosphorus pesticides are light sensitive, store in deactivated amber vials.

* ColdPAK required to maintain integrity of product.



EPA Method 8000 Series

Method 8150/8151 7 Point Working Level Phenoxy-Herbicide Methyl Derivative Curve

The CCC Line for Herbicide analysis provides the necessary free acid and derivatized solutions to establish a calibration curve, perform the required daily QC checks and validate extraction efficiencies through the use of surrogates and matrix spikes.

M-8150/51-CAL-SET

At stated conc. (ng/mL) in Isooctane

Components	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
	M-8150/51-WL	(-2X)	(-4X)	(-10X)	(-25X)	(-35X)	(-50X)
2,4-D	20	40	80	200	500	700	1000
2,4-DB	20	40	80	200	500	700	1000
2,4,5-TP	5	10	20	50	125	175	250
2,4,5-T	5	10	20	50	125	175	250
Dalapon	10	20	40	100	250	350	500
Dicamba	10	20	40	100	250	350	500
Dichloroprop	20	40	80	200	500	700	1000
Dinoseb	5	10	20	50	125	175	250
MCPA	2000	4000	8,000	20,000	50,000	70,000	100,000
MCPP	2000	4000	8,000	20,000	50,000	70,000	100,000
DCAA	20	40	80	200	500	700	1000

Level 1	M-8150/51-WL	1 mL
Level 2	M-8150/51-WL-2X	1 mL
Level 3	M-8150/51-WL-4X	1 mL
Level 4	M-8150/51-WL-10X	1 mL
Level 5	M-8150/51-WL-25X	1 mL
Level 6	M-8150/51-WL-35X	1 mL
Level 7	M-8150/51-WL-50X	1 mL

7 x 1 mL
11 comps.

Level 3 Daily QC Working Level CCC (for low level curves)

M-8150/51-WL-4X-10ML	1 x 10 mL
M-8150/51-WL-4X-25ML	1 x 25 mL
M-8150/51-WL-4X-50ML	1 x 50 mL

At stated conc. in Isooctane

Level 4 Daily QC Working Level CCC (for higher level curves)

M-8150/51-WL-10X-10ML	1 x 10 mL
M-8150/51-WL-10X-25ML	1 x 25 mL
M-8150/51-WL-10X-50ML	1 x 50 mL

At stated conc. in Isooctane

Level 5 Daily QC Working Level CCC (for higher level curves)

M-8150/51-WL-25X-10ML	1 x 10 mL
M-8150/51-WL-25X-25ML	1 x 25 mL
M-8150/51-WL-25X-50ML	1 x 50 mL

At stated conc. in Isooctane

Herbicide Molecular Weights

The COA for the Working Level Herbicide calibration curves and Daily QC check standards lists both the methyl derivative and acid equivalent concentrations. Since the EPA method for Herbicide analysis requires the final analytical results to be calculated and reported as the acid equivalent, AccuStandard provides both formats to ease calculations.

Equivalency conversion to the free acid:

$$\text{ng (free acid)} = \frac{\text{M.W. Herbicide acid}}{\text{M.W. methylated Herbicide}} \times \text{ng (methylated acid)}$$

The molecular weights for conversion of methyl esters to the acid equivalent concentrations are provided above.

Herbicide	Free Acid M.W.	Methylated M.W.
2,4-D	221.04	235.07
Dalapon	143.97	157.00
2,4-DB	249.09	263.12
Dicamba	221.04	235.07
Dichloroprop	235.07	249.09
Dinoseb	240.22	254.24
MCPA	200.62	214.65
MCPP	214.65	228.67
Silvex (2,4,5-TP)	269.51	283.54
2,4,5-T	255.48	269.51

Ready-to-Inject

Method 8150/8151 Working Level Herbicide Standards

Prep Note

To validate instrument response, 10 µL of internal standard is added to a 10 mL herbicide sample extract.

Internal Standard - Herbicide Solution 1

M-8151-IS	1 x 1 mL
M-8151-IS-PAK	5 x 1 mL
250 µg/mL in Acetone	
4,4'-Dibromooctafluorobiphenyl	

Internal Standard - Herbicide Solution 2

M-8151-IS-2	1 x 1 mL
M-8151-IS-2-PAK	5 x 1 mL
250 µg/mL in Acetone	
1,4-Dichlorobenzene	

Laboratory Performance Check Solution

M-8150/51-LPC-5ML	1 x 5 mL
At stated conc. in Isooctane	
3,5-Dichlorobenzoic acid	(600 ng/mL)
Dinoseb	(4 ng/mL)
4-Nitrophenol	(1600 ng/mL)
DCAA	(500 ng/mL)
DBOB	(250 ng/mL)

Prep Note

To verify extraction efficiency, 1 mL of surrogate is added to a herbicide sample.

Herbicide Surrogate Spiking Solution

M-8150/51-SS-WL-25ML	1 x 25 mL
M-8150/51-SS-WL-50ML	1 x 50 mL
2 µg/mL in MeOH	
2,4-Dichlorophenylacetic acid (DCAA)	

Prep Note

To verify QA/QC for the analytical batch, 1 mL of matrix spike is added to an herbicide sample.

Herbicide Matrix Spike (Components as Acids)

M-8150/51-MS-WL-10ML	1 x 10 mL
M-8150/51-MS-WL-25ML	1 x 25 mL
M-8150/51-MS-WL-50ML	1 x 50 mL
At stated conc. in MeOH	
2,4-D	(2 µg/mL)
2,4-DB	(2 µg/mL)
2,4,5-TP (Silvex)	(0.8 µg/mL)
Dalapon	(1 µg/mL)
Dicamba	(1 µg/mL)



Method 8150A/8150B Chlorinated Herbicides by GC/ECD

Chlorinated Herbicides in Ground Water (Rev. 1, July 1992) and their Methyl Derivatives

Compound	(mg/mL) Conc.	Herbicides Acids (in MeOH) Cat. No.	Methyl Derivative (in Hexane) Cat. No.	1 mL
2,4-D	0.2	M-8150S-A-01	M-8150-01	
2,4-DB	0.2	M-8150S-A-02	M-8150-02	
2,4,5-T	0.2	M-8150S-A-03	M-8150-03	
2,4,5-TP	0.2	M-8150S-A-04 *	M-8150-04	
Dalapon	0.2	M-8150S-A-05 *	M-8150-05	
Dicamba	0.2	M-8150S-A-06	M-8150-06	
Dichlorprop	0.2	M-8150S-A-07	M-8150-07	
Dinoseb	0.2	M-8150S-A-08	M-8150-08	
MCPA	2.0	M-8150S-A-09	M-8150-09	
MCPP	2.0	M-8150S-A-10	M-8150-10	
Set of 10 x 1 mL		M-8150A-SET *	M-8150-SET	10 x 1 mL

Underivatized Solution (Varied Concentration)

M-8150A	1 x 1 mL
M-8150A-PAK	5 x 1 mL
0.1 mg/mL in MeOH, except MCPA and MCPP	10 comps.
2,4-D	Dinoseb
Dalapon	MCPA (10 mg/mL)
2,4-DB	MCPP (10 mg/mL)
Dicamba	2,4,5-TP
Dichlorprop	2,4,5-T

Methyl Derivatives Solutions (Varied Concentration)

M-8150	1 x 1 mL
0.1 mg/mL in MeOH, except MCPA and MCPP	10 comps.
2,4-D ME	Dinoseb ME
Dalapon ME	MCPA ME (10 mg/mL)
2,4-DB ME	MCPP ME (10 mg/mL)
Dicamba ME	2,4,5-TP ME
Dichlorprop ME	2,4,5-T ME

Underivatized Solution (Equal Concentration)

M-8150M-A	1 x 1 mL
M-8150M-A-PAK	5 x 1 mL
0.2 mg/mL each in MeOH	10 comps.
2,4-D	Dinoseb
Dalapon	MCPA
2,4-DB	MCPP
Dicamba	2,4,5-TP
Dichlorprop	2,4,5-T

Methyl Derivatives Solutions (Equal Concentration)

M-8150M-SET	2 x 1 mL
(M-8150M, M-8150M-2)	1 x 1 mL
M-8150M	5 x 1 mL
M-8150M-PAK	8 comps.
20 µg/mL each in Hexane	
2,4-D ME	Dichlorprop ME
Dalapon ME	Dinoseb ME
2,4-DB ME	2,4,5-TP ME
Dicamba ME	2,4,5-T ME

Underivatized Surrogate Standards

M-8150B-SS	1 x 1 mL
M-8150B-SS-PAK	5 x 1 mL
0.1 mg/mL in Acetone	
M-8150B-SS-10X	1 x 1 mL
1.0 mg/mL in Acetone	
2,4-Dichlorophenylacetic acid	

M-8150M-2	1 x 1 mL
M-8150M-2-PAK	5 x 1 mL
2,000 µg/mL each in Hexane	2 comps.
MCPA ME	MCPP ME

Internal Standard

M-8151-IS	1 x 1 mL
M-8151-IS-PAK	5 x 1 mL
0.25 mg/mL in Acetone	
4,4'-Dibromooctafluorobiphenyl	

Methyl Derivative Surrogate Standard

M-515-SS	1 x 1 mL
M-515-SS-PAK	5 x 1 mL
0.1 mg/mL in MtBE	
2,4-Dichlorophenylacetic acid methyl ester	

PFB Derivatized Chlorinated Herbicides

M-8150-02-PFB	1 x 1 mL
0.1 mg/mL in MtBE	
2,4-D-PFB	
M-8150-04-PFB	1 x 1 mL
0.1 mg/mL in MtBE	
2,4,5-TP-PFB	

* ColdPAK required to maintain integrity of product.



EPA Method 8000 Series

Method 8151/8151A Chlorinated Herbicides by GC/ECD

Methyl Derivatives

M-8151		1 x 1 mL
0.1 mg/mL each in MtBE, except MCPA & MCPP		18 comps.
Acifluorfen	Dichlorprop	
Bentazon	Dinoseb	
Chloramben	MCPA (10 mg/mL)	
2,4-D	MCPP (10 mg/mL)	
Dalapon	4-Nitrophenol	
2,4-DB	Pentachlorophenol	
DCPA	Picloram	
Dicamba	2,4,5-TP	
3,5-Dichlorobenzoic acid	2,4,5-T	

Underivatized

M-8151A		1 x 1 mL
M-8151A-PAK	SAVE	5 x 1 mL
0.1 mg/mL each in Acetone, except MCPA & MCPP		18 comps.
Acifluorfen	Dichlorprop	
Bentazon	Dinoseb	
Chloramben	MCPA (10 mg/mL)	
2,4-D	MCPP (10 mg/mL)	
Dalapon	4-Nitrophenol	
2,4-DB	Pentachlorophenol	
DCPA diacid	Picloram	
Dicamba	2,4,5-TP	
3,5-Dichlorobenzoic acid	2,4,5-T	

Internal Standards

M-8151-IS		1 x 1 mL
M-8151-IS-PAK	SAVE	5 x 1 mL
0.25 mg/mL in Acetone		
4,4'-Dibromooctafluorobiphenyl		

M-8151-IS-2		1 x 1 mL
M-8151-IS-2-PAK	SAVE	5 x 1 mL
0.25 mg/mL in Acetone		
1,4-Dichlorobenzene		

Surrogate Standards

M-515-SS		1 x 1 mL
M-515-SS-PAK	SAVE	5 x 1 mL
0.1 mg/mL in MtBE		
2,4-Dichlorophenylacetic acid methyl ester		
M-8150B-SS		1 x 1 mL
M-8150B-SS-PAK	SAVE	5 x 1 mL
0.1 mg/mL in Acetone		
M-8150B-SS-10X		1 x 1 mL
1.0 mg/mL in Acetone		
2,4-Dichlorophenylacetic acid		

Method 8240 Volatile Organics by GC/MS

M-8240A *	1 x 1 mL
0.2 mg/mL each in MeOH	41 comps.
Acetone	1,2-Dichloropropane
Acrolein	cis-1,3-Dichloropropene *
Acrylonitrile	trans-1,3-Dichloropropene **
Benzene	Ethanol
Bromodichloromethane	Ethylbenzene
Bromoform	2-Hexanone
2-Butanone	Iodomethane
Carbon disulfide	4-Methyl-2-pentanone
Carbon tetrachloride	Methylene chloride
Chlorobenzene	Styrene
Chloroform	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
cis-1,4-Dichloro-2-butene *	Toluene
trans-1,4-Dichloro-2-butene **	1,1,1-Trichloroethane
1,2-Dichlorobenzene	1,1,2-Trichloroethane
1,3-Dichlorobenzene	Trichloroethene
1,4-Dichlorobenzene	Vinyl acetate
1,1-Dichloroethane	o-Xylene
1,2-Dichloroethane	m-Xylene
1,1-Dichloroethene	p-Xylene
trans-1,2-Dichloroethene	

* cis (1.06 x conc.)
 ** trans (0.94 x conc.)
 + cis (0.1 mg/mL)
 ++ trans (0.1 mg/mL)

Technical Note

Acrolein quickly polymerizes and degrades in methanol solutions; therefore these standards have a short shelf life.

* ColdPAK required to maintain integrity of product.

Auxiliary Standards for all 8240 Methods (VOC analysis) see Catalog Number Index

Surrogate Standard	see CLP-PS-10X
Internal Standard	see CLP-PI-2.5X
Gases	see M-601B
Matrix Spiking Solution	see CLP-003R
Tuning Standard	see CLP-004
System Performance	see CLP-021
Calibration Check Compounds	see CLP-020

Method 8240A Volatiles by GC/MS

APP-9-048-R1-2X	1 x 1 mL
0.2 mg/mL in MeOH	
Chloroprene (Xylene-free)	
S-354-2	1 x 1 mL
0.2 mg/mL in Isooctane	
Ethylene oxide	



Method 8240 & 8260 Volatile Organic Compounds by GC/MS

The following solutions can be used to construct a single calibration curve containing the volatile analytes in Appendix IX for analysis by either Method 8240 or Method 8260 by GC/MS.

Bromochloromethane is excluded in the calibration solutions since it is used as an internal standard in Method 8240. If Method 8260 methodology is used, the addition of bromochloromethane from the internal standard mix can serve as the source for bromochloromethane to complement the target compound list.

Liquids (53 components, does not include Bromochloromethane)

Benzene (01)	1,1-Dichloropropene (33)
Bromobenzene (02)	<i>cis</i> -1,3-Dichloropropene (34A) *
Bromodichloromethane (04)	<i>trans</i> -1,3-Dichloropropene (34B) **
Bromoform (05)	Ethylbenzene (35)
<i>n</i> -Butylbenzene (07)	Hexachlorobutadiene (36)
<i>sec</i> -Butylbenzene (08)	Isopropylbenzene (37)
<i>tert</i> -Butylbenzene (09)	<i>p</i> -Isopropyltoluene (38)
Carbon tetrachloride (10)	Methylene chloride (39)
Chlorobenzene (11)	Naphthalene (40)
Chloroform (13)	<i>n</i> -Propylbenzene (41)
2-Chlorotoluene (15)	Styrene (42)
4-Chlorotoluene (16)	1,1,1,2-Tetrachloroethane (43)
Dibromochloromethane (17)	1,1,2,2-Tetrachloroethane (44)
1,2-Dibromo-3-chloropropane (18)	Tetrachloroethene (45)
1,2-Dibromoethane (19)	Toluene (46)
Dibromomethane (20)	1,2,3-Trichlorobenzene (47)
1,2-Dichlorobenzene (21)	1,2,4-Trichlorobenzene (48)
1,3-Dichlorobenzene (22)	1,1,1-Trichloroethane (49)
1,4-Dichlorobenzene (23)	1,1,2-Trichloroethane (50)
1,1-Dichloroethane (25)	Trichloroethene (51)
1,2-Dichloroethane (26)	1,2,3-Trichloropropane (53)
1,1-Dichloroethene (27)	1,2,4-Trimethylbenzene (54)
<i>cis</i> -1,2-Dichloroethene (28)	1,3,5-Trimethylbenzene (55)
<i>trans</i> -1,2-Dichloroethene (29)	<i>o</i> -Xylene (57)
1,2-Dichloropropane (30)	<i>m</i> -Xylene (58)
1,3-Dichloropropane (31)	<i>p</i> -Xylene (59)
2,2-Dichloropropane (32)	

* *cis* (1.06 x conc.)
** *trans* (0.94 x conc.)

6 Gas Components

Bromomethane (06)	Dichlorodifluoromethane (24)
Chloroethane (12)	Trichlorofluoromethane (52)
Chloromethane (14)	Vinyl chloride (56)

Liquids (53 components)

M-502A-R2	1 x 1 mL
M-502A-R2-PAK	5 x 1 mL
0.2 mg/mL each in MeOH	
M-502A-R2-10X	1 x 1 mL
M-502A-R2-10X-PAK	5 x 1 mL
2.0 mg/mL each in MeOH	53 comps.

Gases (6 components)

M-502B	1 x 1 mL
M-502B-PAK	5 x 1 mL
0.2 mg/mL each in MeOH	
M-502B-10X	1 x 1 mL
M-502B-10X-PAK	5 x 1 mL
2.0 mg/mL each in MeOH	6 comps.

Liquid and Gas Sets

M-502A-R2/B-SET	2 x 1 mL
0.2 mg/mL each in MeOH	(M-502A-R2, M-502B)
M-502A-R2/B-10X-SET	2 x 1 mL
2.0 mg/mL each in MeOH	(M-502A-R2-10X, M-502B-10X)

All 60 liquid and gas components in One Solution

Liquids (54 comps.) and Gases (6 comps.)

M-502	1 x 1 mL
M-502-PAK	5 x 1 mL
0.2 mg/mL each in MeOH	
M-502-10X	1 x 1 mL
M-502-10X-PAK	5 x 1 mL
2.0 mg/mL each in MeOH	60 comps.

See also Method 8240 & 8260

Appendix IX Volatiles

M-8240C 1 x 1 mL
0.2 mg/mL each in MeOH 17 comps.

Acetonitrile	Methyl methacrylate
Allyl chloride	Nitrobenzene
1,2-Dibromo-3-chloropropane	Pentachloroethane
Dibromomethane	Propionitrile
1,2-Dibromoethane	Pyridine
1,4-Dioxane	1,1,1,2-Tetrachloroethane
Ethyl methacrylate	1,2,4-Trichlorobenzene
Isobutyl alcohol	1,2,3-Trichloropropane
Methacrylonitrile	

M-8240C-R3 1 x 1 mL
At stated conc. in MeOH 12 comps.

Acetonitrile (2.0 mg/mL)	Ethyl methacrylate (0.2 mg/mL)
Allyl chloride (0.2 mg/mL)	Isobutyl alcohol (4.0 mg/mL)
<i>cis</i> -1,4-Dichloro-2-butene (0.2 mg/mL)	Methacrylonitrile (2.0 mg/mL)
<i>trans</i> -1,4-Dichloro-2-butene (0.2 mg/mL)	Methyl methacrylate (0.2 mg/mL)
1,4-Dioxane (4.0 mg/mL)	Pentachloroethane (0.2 mg/mL)
Ethanol (4.0 mg/mL)	Propionitrile (2.0 mg/mL)

M-8240C-R3-10X 1 x 1 mL
At stated conc. in MeOH 12 comps.

Acetonitrile (20 mg/mL)	Ethyl methacrylate (2.0 mg/mL)
Allyl chloride (2.0 mg/mL)	Isobutyl alcohol (40 mg/mL)
<i>cis</i> -1,4-Dichloro-2-butene (2.0 mg/mL)	Methacrylonitrile (20 mg/mL)
<i>trans</i> -1,4-Dichloro-2-butene (2.0 mg/mL)	Methyl methacrylate (2.0 mg/mL)
1,4-Dioxane (40 mg/mL)	Pentachloroethane (2.0 mg/mL)
Ethanol (40 mg/mL)	Propionitrile (20 mg/mL)

Same as M-8240C-R3-10X without Pentachloroethane

M-8240C-R6 1 x 1 mL
At stated conc. in MeOH 11 comps.

Acetonitrile (20 mg/mL)	Ethyl methacrylate (2.0 mg/mL)
Allyl chloride (2.0 mg/mL)	Isobutyl alcohol (40 mg/mL)
<i>cis</i> -1,4-Dichloro-2-butene (2.0 mg/mL)	Methacrylonitrile (20 mg/mL)
<i>trans</i> -1,4-Dichloro-2-butene (2.0 mg/mL)	Methyl methacrylate (2.0 mg/mL)
1,4-Dioxane (40 mg/mL)	Propionitrile (20 mg/mL)
Ethanol (40 mg/mL)	

M-8260-ADD * 1 x 1 mL
0.2 mg/mL each in MeOH 8 comps.
M-8260-ADD-10X * 1 x 1 mL
M-8260-ADD-10X-PAK * 5 x 1 mL
2.0 mg/mL each in MeOH 8 comps.

Acetone	2-Hexanone
2-Butanone	Iodomethane
Carbon disulfide	4-Methyl-2-pentanone
2-Chloroethylvinyl ether	Vinyl acetate

M-603 1 x 1 mL
M-603-PAK 5 x 1 mL
1.0 mg/mL each in Water 2 comps.
M-603-10X 1 x 1 mL
10.0 mg/mL each in Water 2 comps.
M-603-M-0.1X * 1 x 1 mL
100 µg/mL each in MeOH:Water (90:10) 2 comps.
M-603-M-5X * 1 x 1 mL
5 mg/mL each in MeOH:Water (90:10) 2 comps.

Acrolein	Acrylonitrile
----------	---------------

* ColdPAK required to maintain integrity of product.



EPA Method 8000 Series

Method 8260B Volatile Organic Compounds by GC/MS

The following formulations have been put together for a complete 8260B target compound list. We have utilized our standard M-502A-R containing the 54 typical analytes found in this method and a number of other EPA methods. In addition, we have tried to minimize the number of additional standards required to get the complete analyte list, while still addressing the various chromatographic problems associated to specific analytes.

Liquids

M-502A-R

0.2 mg/mL each in MeOH

1 x 1 mL

54 comps.

Benzene (01)	2,2-Dichloropropane (32)
Bromobenzene (02)	1,1-Dichloropropene (33)
Bromochloromethane (03)	<i>cis</i> -1,3-Dichloropropene (34A) *
Bromodichloromethane (04)	<i>trans</i> -1,3-Dichloropropene (34B) **
Bromoform (05)	Ethylbenzene (35)
<i>n</i> -Butylbenzene (07)	Hexachlorobutadiene (36)
<i>sec</i> -Butylbenzene (08)	Isopropylbenzene (<i>Cumene</i>) (37)
<i>tert</i> -Butylbenzene (09)	<i>p</i> -Isopropyltoluene (<i>p</i> - <i>Cymene</i>) (38)
Carbon tetrachloride (10)	Methylene chloride (39)
Chlorobenzene (11)	Naphthalene (40)
Chloroform (13)	<i>n</i> -Propylbenzene (41)
2-Chlorotoluene (15)	Styrene (42)
4-Chlorotoluene (16)	1,1,1,2-Tetrachloroethane (43)
Dibromochloromethane (17)	1,1,2,2-Tetrachloroethane (44)
1,2-Dibromo-3-chloropropane (18)	Tetrachloroethene (45)
1,2-Dibromoethane (19)	Toluene (46)
Dibromomethane (20)	1,2,3-Trichlorobenzene (47)
1,2-Dichlorobenzene (21)	1,2,4-Trichlorobenzene (48)
1,3-Dichlorobenzene (22)	1,1,1-Trichloroethane (49)
1,4-Dichlorobenzene (23)	1,1,2-Trichloroethane (50)
1,1-Dichloroethane (25)	Trichloroethene (51)
1,2-Dichloroethane (26)	1,2,3-Trichloropropane (53)
1,1-Dichloroethene (27)	1,2,4-Trimethylbenzene (54)
<i>cis</i> -1,2-Dichloroethene (28)	1,3,5-Trimethylbenzene (55)
<i>trans</i> -1,2-Dichloroethene (29)	<i>o</i> -Xylene (57)
1,2-Dichloropropane (30)	<i>m</i> -Xylene (58)
1,3-Dichloropropane (31)	<i>p</i> -Xylene (59)

* *cis* (1.06 x conc.)

** *trans* (0.94 x conc.)

Additional VOCs by Method 8260B

M-8260B-01

M-8260B-01-PAK

2000 µg/mL each in MeOH

SAVE

1 x 1 mL

5 x 1 mL

11 comps.

Benzyl chloride	2-Nitropropane
1-Chlorobutane	Dibromofluoromethane
1-Chlorohexane	Methyl acrylate
1,2,3,4-Diepoxybutane	MtBE
Diethyl ether	Pentafluorobenzene
Nitrobenzene	

M-8260B-02 *

M-8260B-02-PAK *

2000 µg/mL each in MeOH

SAVE

1 x 1 mL

5 x 1 mL

10 comps.

Allyl alcohol	Ethyl acetate
1-Butanol	Hexachloroethane
Chloroacetonitrile	2-Hydroxypropionitrile
3-Chloropropionitrile	Malonitrile
Epichlorohydrin	Pyridine

M-8260B-03

M-8260B-03-PAK

2000 µg/mL each in MeOH:Water (90:10)

SAVE

1 x 1 mL

5 x 1 mL

4 comps.

N-Nitrosodi- <i>n</i> -butylamine	Propylamine
2-Picoline	<i>o</i> -Toluidine

M-8260B-04

M-8260B-04-PAK

2000 µg/mL each in MeOH

SAVE

1 x 1 mL

5 x 1 mL

6 comps.

<i>t</i> -Butanol	1-Propanol
2-Chloroethanol	Isopropanol
1,3-Dichloro-2-propanol	Propargyl alcohol

M-8260B-06-PAK *

2000 µg/mL each in MeOH

SAVE

5 x 1 mL

3 comps.

Bromoacetone	<i>b</i> -Propiolactone
2-Pentanone	

Chloroprene (Xylene-Free)

APP-9-048-R1-10X

1.0 mg/mL in MeOH

1 x 1 mL

APP-9-048-R1-20X

2.0 mg/mL in MeOH

1 x 1 mL

Ethylene oxide

M-8015B/5031-14-R1 *

5 mg/mL in H₂O

1 x 1 mL

Chloral hydrate

M-E-1179-M

1.0 mg/mL in MeOH

1 x 1 mL

Gases

M-502B

0.2 mg/mL each in MeOH

1 x 1 mL

6 comps.

Bromomethane (06)	Dichlorodifluoromethane (24)
Chloroethane (12)	Trichlorofluoromethane (52)
Chloromethane (14)	Vinyl chloride (56)

Volatile Organic Compounds (VOC) Set

M-502A-R/B-SET

set of 2 x 1 mL

(includes 1 mL of 54 liquids and 1 mL of 6 gas components)

M-603

1.0 mg/mL each in water

1 x 1 mL

2 comps.

Acrolein	Acrylonitrile
----------	---------------

Technical Note

Acrolein quickly polymerizes and degrades in methanol solutions; therefore these standards have a short shelf life.

M-8240C-R3-10X

At stated conc. in MeOH

1 x 1 mL

12 comps.

Acetonitrile	(20 mg/mL)	Ethyl methacrylate	(2.0 mg/mL)
Allyl chloride	(2.0 mg/mL)	Isobutyl alcohol	(40 mg/mL)
<i>cis</i> -1,4-Dichloro-2-butene	(2.0 mg/mL)	Methacrylonitrile	(20 mg/mL)
<i>trans</i> -1,4-Dichloro-2-butene	(2.0 mg/mL)	Methyl methacrylate	(2.0 mg/mL)
1,4-Dioxane	(40 mg/mL)	Pentachloroethane	(2.0 mg/mL)
Ethanol	(40 mg/mL)	Propionitrile	(20 mg/mL)

Technical Note

Bromoform, Chloroform and other light volatiles may exhibit reduced response from a contaminated trap, un-optimized purge & trap conditions, i.e. purge flow too high / low, or contamination / cold spot in the transfer line.

* To delay premature breakdown of thermally labile products in transit a ColdPAK is required.

M-8260B continued to the next page

Method 8260B (Continued) Volatile Organic Compounds by GC/MS

Internal Standards

M-8260-IS		1 x 1 mL
M-8260-IS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		4 comps.
M-8260-IS-10X		1 x 1 mL
M-8260-IS-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		4 comps.

Chlorobenzene-d ₅	1,4-Dichlorobenzene-d ₄
1,4-Difluorobenzene	Pentafluorobenzene

M-8260-IS-R		1 x 1 mL
M-8260-IS-R-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		4 comps.
M-8260-IS-R-10X		1 x 1 mL
M-8260-IS-R-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		4 comps.

2-Bromo-1-chloropropane	1,4-Dichlorobenzene-d ₄
1,4-Difluorobenzene	Pentafluorobenzene

M-8260A/B-IS		1 x 1 mL
M-8260A/B-IS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		3 comps.
M-8260A/B-IS-10X		1 x 1 mL
M-8260A/B-IS-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		3 comps.

Chlorobenzene-d ₅	Fluorobenzene
1,4-Dichlorobenzene-d ₄	

Combined Internal/Surrogate Standard VOA Mix

M-8260A/B-IS/SS		1 x 1 mL
M-8260A/B-IS/SS-PAK	SAVE	5 x 1 mL
200 µg/mL each in MeOH		7 comps.
M-8260A/B-IS/SS-10X		1 x 1 mL
M-8260A/B-IS/SS-10XPAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		7 comps.

p-Bromofluorobenzene	1,2-Dichloroethane-d ₄
Chlorobenzene-d ₅	Fluorobenzene
Dibromofluoromethane	Toluene-d ₈
1,4-Dichlorobenzene-d ₄	

Surrogate Standards

M-8260-SS		1 x 1 mL
M-8260-SS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		3 comps.
M-8260-SS-10X		1 x 1 mL
M-8260-SS-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		3 comps.

4-Bromofluorobenzene	Toluene-d ₈
Dibromofluoromethane	

M-8260-SS-2		1 x 1 mL
0.2 mg/mL in MeOH		
M-8260-SS-2-10X		1 x 1 mL
2.0 mg/mL in MeOH		

Dibromofluoromethane

M-8260A/B-SS		1 x 1 mL
M-8260A/B-SS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		4 comps.
M-8260A/B-SS-10X		1 x 1 mL
M-8260A/B-SS-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		4 comps.

p-Bromofluorobenzene	1,2-Dichloroethane-d ₄
Dibromofluoromethane	Toluene-d ₈

**Tens of thousands of Standards
Ready-to-Ship**





EPA Method 8000 Series

Method 8240 & 8260 Volatile Organic Compounds Auxiliary Standards

Internal Standard VOA

M-8240/60-IS		1 x 1 mL
M-8240/60-IS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		5 comps.
M-8240/60-IS-10X		1 x 1 mL
M-8240/60-IS-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		5 comps.
Bromochloromethane	1,4-Difluorobenzene	
Chlorobenzene-d ₅	Pentafluorobenzene	
1,4-Dichlorobenzene-d ₄		

Surrogate Standard VOA

M-8240/60-SS		1 x 1 mL
M-8240/60-SS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		4 comps.
M-8240/60-SS-10X		1 x 1 mL
M-8240/60-SS-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		4 comps.
p-Bromofluorobenzene	1,2-Dichloroethane-d ₄	
Dibromofluoromethane	Toluene-d ₈	

Internal / Surrogate Standard VOA

M-8240/60-IS/SS		1 x 1 mL
M-8240/60-IS/SS-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		9 comps.
M-8240/60-IS/SS-10X		1 x 1 mL
M-8240/60-IS/SS-10XPAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		9 comps.
Bromochloromethane	1,2-Dichloroethane-d ₄	
p-Bromofluorobenzene	1,4-Difluorobenzene	
Chlorobenzene-d ₅	Pentafluorobenzene	
Dibromofluoromethane	Toluene-d ₈	
1,4-Dichlorobenzene-d ₄		

Volatile Calibration Check Compounds (CCC)

CLP-020		1 x 1 mL
CLP-020-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		6 comps.
CLP-020-10X		1 x 1 mL
CLP-020-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		6 comps.
Chloroform	Ethylbenzene	
1,1-Dichloroethene	Toluene	
1,2-Dichloropropane	Vinyl chloride	

Volatile System Performance Check Compounds (SPCC)

CLP-021		1 x 1 mL
CLP-021-PAK	SAVE	5 x 1 mL
0.2 mg/mL each in MeOH		5 comps.
CLP-021-10X		1 x 1 mL
CLP-021-10X-PAK	SAVE	5 x 1 mL
2.0 mg/mL each in MeOH		5 comps.
Bromoform	1,1-Dichloroethane	
Chlorobenzene	1,1,2,2-Tetrachloroethane	
Chloromethane		

Instrument Performance Check Solutions

CLP-004		1 x 1 mL
CLP-004-PAK	SAVE	5 x 1 mL
25 µg/mL in MeOH		
CLP-004-10X		1 x 1 mL
CLP-004-10X-PAK	SAVE	5 x 1 mL
250 µg/mL in MeOH		
CLP-004-100X		1 x 1 mL
CLP-004-100X-PAK	SAVE	5 x 1 mL
2500 µg/mL in MeOH		
p-Bromofluorobenzene		

Purgeable Organic Matrix Spiking Solutions

CLP-003-R		1 x 1 mL
CLP-003-R-PAK	SAVE	5 x 1 mL
0.25 mg/mL each in MeOH		5 comps.
CLP-003-R-10X		1 x 1 mL
CLP-003-R-10X-PAK	SAVE	5 x 1 mL
2.5 mg/mL each in MeOH		5 comps.
Benzene	Toluene	
Chlorobenzene	Trichloroethene	
1,1-Dichloroethene		



Thousands of Standards, just a click away
AccuStandard.com

Method 8270C/D Semi-Volatile by GC/MS as core mixtures

The primary analytes typically analyzed in Method 8270 version C and D have been formulated based on one of the following considerations: large core mixes, analyte retention time association to ISTD's, similar functional groups, Third Party Certified Standards or as working level Ready-to-Inject standards.

Use of these Method 8270C/D components in 5 mixtures can save you time and money in preparing your calibration curves. Four high concentration solutions CLP-HC-BN-SET, CLP-HC-A-R, CLP-HC-X1 and Z-014E can be combined to give you the 92 typical analytes needed for Method 8270C/D. Product Z-014E-R can be used in lieu of Z-014E for those labs interested in adding pyridine to their target list.

These mixtures can also serve as your **second source** requirements since they are independently prepared from product M-8270 (7 x 1 mL).

Base-Neutral Mixture (44 components)

CLP-HC-BN-R

Acenaphthene	4-Chlorophenyl phenyl ether	Hexachlorobenzene
Acenaphthylene	Chrysene	Hexachlorobutadiene
Anthracene	Dibenz[a,h]anthracene	Hexachlorocyclopentadiene
Azobenzene	Di- <i>n</i> -butyl phthalate	Hexachloroethane
Benz[a]anthracene	1,2-Dichlorobenzene	Indeno[1,2,3-cd]pyrene
Benzo[b]fluoranthene	1,3-Dichlorobenzene	Isophorone
Benzo[k]fluoranthene	1,4-Dichlorobenzene	Naphthalene
Benzo[g,h,i]perylene	Diethyl phthalate	Nitrobenzene
Benzo[a]pyrene	Dimethyl phthalate	N-Nitrosodimethylamine
4-Bromophenyl phenyl ether	2,4-Dinitrotoluene	N-Nitrosodiphenylamine
Butyl benzyl phthalate	2,6-Dinitrotoluene	N-Nitrosodi- <i>n</i> -propylamine
bis(2-Chloroethoxy)methane	Di- <i>n</i> -octyl phthalate	Phenanthrene
bis(2-Chloroethyl) ether	bis(2-Ethylhexyl)phthalate	Pyrene
bis(2-Chloro-1-methylethyl) ether	Fluoranthene	1,2,4-Trichlorobenzene
2-Chloronaphthalene	Fluorene	

Benzidine Mixture (2 comps.)

Z-014F

Benzidine
3,3'-Dichlorobenzidine

Technical Note

Azobenzene was substituted for 1,2-diphenylhydrazine since it pyrolyses to azobenzene under GC operating conditions.

Base-Neutrals

CLP-HC-BN-R

2.0 mg/mL each in Benzene:CH₂Cl₂:AcCN (40:40:20)

CLP-HC-BN-R-PAK

SAVE

2.0 mg/mL each in Benzene:CH₂Cl₂:AcCN (40:40:20)

1 x 1 mL

44 comps.

5 x 1 mL

44 comps.

Base-Neutral and Benzidine Sets

CLP-HC-BN-SET

2 x 1 mL

(CLP-HC-BN-R, Z-014F)

CLP-HC-BN-SET-PAK

SAVE

5 x (2 x 1 mL)

5 x (CLP-HC-BN-R, Z-014F)

Benzidine

Z-014F

2.0 mg/mL each in MeOH

1 x 1 mL

2 comps.

Additional Analyte Solutions

Acid Composite Mixture

CLP-HC-A-R

2.0 mg/mL each in CH₂Cl₂

1 x 1 mL

19 comps.

Benzoic acid
4-Chloro-3-methylphenol
2-Chlorophenol
<i>o</i> -Cresol
<i>p</i> -Cresol
2,4-Dichlorophenol
2,6-Dichlorophenol
2,4-Dimethylphenol
4,6-Dinitro-2-methylphenol
2,4-Dinitrophenol
Ethyl methanesulfonate
Methyl methanesulfonate
2-Nitrophenol
4-Nitrophenol
Pentachlorophenol
Phenol
2,3,4,6-Tetrachlorophenol
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol

Composite #1

Z-014E

2.0 mg/mL each in CH₂Cl₂

1 x 1 mL

8 comps.

Aniline	2-Methylnaphthalene
Benzyl alcohol	2-Nitroaniline
4-Chloroaniline	3-Nitroaniline
Dibenzofuran	4-Nitroaniline

Composite #2

Z-014E-R

2.0 mg/mL each in CH₂Cl₂

1 x 1 mL

9 comps.

Aniline	2-Nitroaniline
Benzyl alcohol	3-Nitroaniline
4-Chloroaniline	4-Nitroaniline
Dibenzofuran	Pyridine
2-Methylnaphthalene	

Composite #3A

CLP-HC-X1

2.0 mg/mL each in CH₂Cl₂

1 x 1 mL

19 comps.

Acetophenone
4-Aminobiphenyl
1-Chloronaphthalene
Dibenz[a,j]acridine
<i>p</i> -Dimethylaminoazobenzene
7,12-Dimethylbenz[a]anthracene
α,α -Dimethylphenethylamine
Diphenylamine
3-Methylcholanthrene
1-Naphthylamine
2-Naphthylamine
N-Nitrosodi- <i>n</i> -butylamine
N-Nitrosopiperidine
Pentachlorobenzene
Pentachloronitrobenzene
Phenacetin
2-Picoline
Pronamide
1,2,4,5-Tetrachlorobenzene

M-8270-07

2.0 mg/mL each in CH₂Cl₂

1 x 1 mL

15 comps.

Aramite	Kepone
Chlorobenzilate	Methyl parathion
Diallate	Parathion
2,4-D	Phorate
Dimethoate	Silvex (2,4,5-TP)
Dinoseb	Sulfotep
Disulfoton	Thionazin
Famphur	

M-8270-08

2.0 mg/mL each in CH₂Cl₂

1 x 1 mL

9 comps.

3,3'-Dimethyl benzidine	N-Nitrosopyrrolidine
4-Nitroquinoline-1-oxide	5-Nitro- <i>o</i> -toluidine
N-Nitrosodiethylamine	<i>p</i> -Phenylenediamine
N-Nitrosomethylethylamine	<i>o</i> -Toluidine
N-Nitrosomorpholine	

M-8270-09

2.0 mg/mL each in CH₂Cl₂

1 x 1 mL

10 comps.

2-Acetyl aminofluorene	Isosafrole
<i>m</i> -Dinitrobenzene	Methapyrilene
Hexachlorophene	1,4-Naphthoquinone
Hexachloropropene	Safrole
Isodrin	O,O,O-Triethyl phosphorothioate



EPA Method 8000 Series

Method 8270C/D (Continued) Auxiliary Standards

Internal Standard

Z-014J		1 x 1 mL
Z-014J-PAK	SAVE	5 x 1 mL
4.0 mg/mL each in CH ₂ Cl ₂		6 comps.
Acenaphthene-d ₁₀	Naphthalene-d ₈	
Chrysene-d ₁₂	Perylene-d ₁₂	
1,4-Dichlorobenzene-d ₄	Phenanthrene-d ₁₀	

Surrogate Standards

M-8270-SS		1 x 1 mL
M-8270-SS-PAK	SAVE	5 x 1 mL
4.0 mg/mL each in CH ₂ Cl ₂		6 comps.
2-Fluorobiphenyl	Phenol-d ₅	
2-Fluorophenol	<i>p</i> -Terphenyl-d ₁₄	
Nitrobenzene-d ₅	2,4,6-Tribromophenol	

M-8270-SS-R		1 x 1 mL
M-8270-SS-R-PAK	SAVE	5 x 1 mL
At stated conc. each in CH ₂ Cl ₂ :MeOH (80:20)		6 comps.
2-Fluorobiphenyl (1.0 mg/mL)	Phenol-d ₅ (2.0 mg/mL)	
2-Fluorophenol (2.0 mg/mL)	Terphenyl-d ₁₄ (1.0 mg/mL)	
Nitrobenzene-d ₅ (1.0 mg/mL)	2,4,6-Tribromophenol (2.0 mg/mL)	

Base/Neutrals & Acids - Matrix Standard Spiking Solutions

CLP-007-SET		2 x 1 mL
CLP-007-SET-PAK	SAVE	5 x (2 x 1 mL)
		(CLP-007A, CLP-007B)

Base/Neutrals

CLP-007A		1 x 1 mL
1.0 mg/mL each in MeOH		6 comps.
Acenaphthene	N-nitroso-di- <i>n</i> -propylamine	
1,4-Dichlorobenzene	Pyrene	
2,4-Dinitrotoluene	1,2,4-Trichlorobenzene	

Acids

CLP-007B		1 x 1 mL
2.0 mg/mL each in MeOH		5 comps.
2-Chlorophenol	Pentachlorophenol	
4-Chloro-3-methylphenol	Phenol	
4-Nitrophenol		

GC/MS Tuning Standard

M-625-TS-20X		1 x 1 mL
1.0 mg/mL each in CH ₂ Cl ₂		4 comps.
Benzidine	DFTPP	
<i>p,p'</i> -DDT	Pentachlorophenol	

Calibration Check Compounds (CCC)

CLP-011-SET	set of 2 x 1 mL
	(CLP-011A, CLP-011B)

Base/Neutrals

CLP-011A		1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂		7 comps.
Acenaphthene	Hexachlorobutadiene	
Benzo[a]pyrene	Fluoranthene	
1,4-Dichlorobenzene	N-nitroso-diphenylamine	
Di- <i>n</i> -octyl phthalate		

Acids

CLP-011B		1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂		6 comps.
4-Chloro-3-methylphenol	Pentachlorophenol	
2,4-Dichlorophenol	Phenol	
2-Nitrophenol	2,4,6-Trichlorophenol	

System Performance Check Compounds (SPCC)

CLP-010		1 x 1 mL
0.2 mg/mL each in CH ₂ Cl ₂		4 comps.
CLP-010-10X		1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂		4 comps.
2,4-Dinitrophenol	4-Nitrophenol	
Hexachlorocyclopentadiene	N-nitroso-di- <i>n</i> -propylamine	

Multi-Component Analytes

Polychlorinated Biphenyls, Chlordane & Toxaphene

Each at 1,000 µg/mL in Hexane
AccuPAK™ (5 x 1 mL)
SAVE

Aroclors #	Cat. No.	1 mL	Cat. No.	PAK
Aroclor 1016	C-216S-H-10X		C-216S-H-10X-PAK	
Aroclor 1221	C-221S-H-10X		C-221S-H-10X-PAK	
Aroclor 1232	C-232S-H-10X		C-232S-H-10X-PAK	
Aroclor 1242	C-242S-H-10X		C-242S-H-10X-PAK	
Aroclor 1248	C-248S-H-10X		C-248S-H-10X-PAK	
Aroclor 1254	C-254S-H-10X		C-254S-H-10X-PAK	
Aroclor 1260	C-260S-H-10X		C-260S-H-10X-PAK	
Aroclor 1262	C-262S-H-10X		C-262S-H-10X-PAK	
Aroclor 1268	C-268S-H-10X		C-268S-H-10X-PAK	
Pesticides				
Chlordane	P-017S-H-10X		P-017S-H-10X-PAK	
Toxaphene	P-093S-H-10X		P-093S-H-10X-PAK	



Method 8270C/D (Continued) Semi-Volatiles by Capillary Column GC/MS

These Method 8270C/D formulations are designed based on the association of the analyte to a specific internal standard. These formulations allow for easy preparation of the typical analytes in the calibration curve. In addition, instrument/method problems can be rapidly diagnosed by examining those specific analytes and the associated internal standard in the affected part of the analysis.

Save when ordering a complete set over individual solutions

Complete 8270 Method Mixture Set

M-8270-SET
M-8270-R-SET

7 x 1 mL (M-8270-01,M-8270-02,M-8270-03,M-8270-04A,M-8270-04B,M-8270-05,M-8270-06)
7 x 1 mL (M-8270-01,M-8270-02,M-8270-03,M-8270-04A,M-8270-04B-R1,M-8270-05,M-8270-06)

M-8270-01 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 17 comps.	M-8270-02 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 18 comps.	M-8270-03 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 24 comps.
Aniline Benzyl alcohol bis(2-Chloroethyl) ether bis(2-Chloro-1-methylethyl) ether 2-Chlorophenol 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene Ethylmethanesulfonate Hexachloroethane Methylmethanesulfonate 2-Methylphenol 4-Methylphenol N-Nitrosodimethylamine N-Nitrosodi-n-propylamine Phenol 2-Picoline		Acetophenone Benzoic acid bis(2-Chloroethoxy)methane 4-Chloroaniline 4-Chloro-3-methylphenol 2,4-Dichlorophenol 2,6-Dichlorophenol α,α-Dimethylphenethylamine 2,4-Dimethylphenol Hexachlorobutadiene Isophorone 2-Methylnaphthalene Naphthalene Nitrobenzene 2-Nitrophenol N-Nitroso-di-n-butylamine N-Nitrosopiperidine 1,2,4-Trichlorobenzene		Acenaphthene Acenaphthylene 1-Chloronaphthalene 2-Chloronaphthalene 4-Chlorophenyl phenyl ether Dibenzofuran Diethyl phthalate Dimethyl phthalate 2,4-Dinitrophenol 2,4-Dinitrotoluene 2,6-Dinitrotoluene Fluorene Hexachlorocyclopentadiene 1-Naphthylamine 2-Naphthylamine 2-Nitroaniline 3-Nitroaniline 4-Nitroaniline 4-Nitrophenol Pentachlorobenzene 1,2,4,5-Tetrachlorobenzene 2,3,4,6-Tetrachlorophenol 2,4,6-Trichlorophenol 2,4,5-Trichlorophenol	

M-8270-04A 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 9 comps.
4-Aminobiphenyl Anthracene 4-Bromophenyl phenyl ether Di-n-butyl phthalate 4,6-Dinitro-2-methylphenol Fluoranthene Hexachlorobenzene Pentachlorophenol Phenanthrene	

M-8270-04B 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 6 comps.
Diphenylamine 1,2-Diphenylhydrazine N-Nitrosodiphenylamine Pentachloronitrobenzene Phenacetin Pronamide	

M-8270-05 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 8 comps.
Benzidine Benzo[a]anthracene bis(2-Ethylhexyl)phthalate Butylbenzylphthalate Chrysene 3,3'-Dichlorobenzidine p-Dimethylaminoazobenzene Pyrene	

M-8270-06 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 10 comps.
Benzo[b]fluoranthene Benzo[k]fluoranthene Benzo[g,h,i]perylene Benzo[a]pyrene Dibenz[a,j]acridine Dibenz[a,h]anthracene 7,12-Dimethylbenz[a]anthracene Di-n-octylphthalate Indeno[1,2,3-cd]pyrene 3-Methylcholanthrene	

Technical Note

Under EPA recommended GC conditions (Method 8270) the analyte 1,2-Diphenylhydrazine is converted in varying degrees to Azobenzene and breakdown products. According to our study, the use of an injection port temperature range (240°C - 300°C) will cause the 1,2-Diphenylhydrazine to break down.

Substituting Azobenzene for 1,2-Diphenylhydrazine will allow analysis yielding a single peak regardless of the EPA recommended injection port temperature range used.

Alternate Formulation

M-8270-04B-R1 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 6 comps.
Azobenzene Diphenylamine N-Nitrosodiphenylamine Pentachloronitrobenzene Phenacetin Pronamide	

M-8270-07 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 15 comps.	M-8270-08 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 9 comps.	M-8270-09 2.0 mg/mL each in CH ₂ Cl ₂	1 x 1 mL 10 comps.
Aramite Chlorobenzilate Diallate 2,4-D Dimethoate Dinoseb Disulfoton Famphur	Kepone Methyl parathion Parathion Phorate Silvex (2,4,5-TP) Sulfotep Thionazin	3,3'-Dimethyl benzidine 4-Nitroquinoline-1-oxide N-Nitrosodiethylamine N-Nitrosomethylethylamine N-Nitrosomorpholine	N-Nitrosopyrrolidine 5-Nitro-o-toluidine p-Phenylenediamine o-Toluidine	2-Acetyl aminofluorene 1,3-Dinitrobenzene Hexachlorophene Hexachloropropene Isodrin	Isosafrole Methapyrilene 1,4-Naphthoquinone Safrole O,O,O-Triethylphosphorothioate



EPA Method 8000 Series

Method 8270C/D (Continued) Appendix IX Semi-Volatiles Analyzed by Method 8270

M-8270-10 1 x 1 mL
2.0 mg/mL in MeOH
sym-Trinitrobenzene

M-8270-10-R 1 x 1 mL
2.0 mg/mL each in MeOH 2 comps.
Pyridine *sym*-Trinitrobenzene

Additions to Method 8270

M-8270-13-SET 2 x 1 mL
(M-8270-13A-R, M-8270-13B-R)

M-8270-13A-R 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 12 comps.

4-Aminoazobenzene	4,4'-Methylenebis(N,N-dimethylaniline)
3-Amino-9-ethylcarbazole	4,4'-Methylene bis(2-chloroaniline)
<i>o</i> -Anisidine	4,4'-Oxydianiline
5-Chloro-2-methylaniline	2-Picoline
<i>p</i> -Cresidine	Pyridine
2,4-Diaminotoluene	2,4,5-Trimethylaniline

M-8270-13B-R 1 x 1 mL
2.0 mg/mL each in THF 3 comps.

2-Aminoanthraquinone	4-Chloro-1,3-phenylenediamine
4-Chloro-1,2-phenylenediamine	

M-8270-14-SET 3 x 1 mL
(M-8270-14A, M-8270-14B, M-8270-14C)

M-8270-14A 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 6 comps.

<i>m</i> -Cresol	Thiophenol
<i>o</i> -Cresol	tris(2,3-Dibromopropyl)phosphate
Resorcinol	Tri- <i>p</i> -tolyl phosphate

M-8270-14B 1 x 1 mL
2.0 mg/mL each in THF 5 comps.

<i>p</i> -Benzoquinone	Phthalic anhydride
Hydroquinone	Trimethyl phosphate
Maleic anhydride	

M-8270-14C * 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂:MeOH (75:25) 5 comps.

1-Acetyl-2-thiourea	3-Picolyl chloride HCL
Diethyl sulfate	Toluene diisocyanate
Hexamethylphosphoramide	

M-8270-15 1 x 1 mL
1.0 mg/mL each in CH₂Cl₂:MeOH (90:10) 13 comps.

Dibenzo[a,e]pyrene	Nicotine
1,2-Dibromo-3-chloropropane	5-Nitroacenaphthene
Diethyl stilbestrol	5-Nitro- <i>o</i> -anisidine
1,2-Dinitrobenzene	4-Nitrobiphenyl
1,4-Dinitrobenzene	Propylthiouracil
5,5-Diphenylhydantoin	Strychnine
Mestranol	

Pesticides

M-8270-16 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 10 comps.

Anilazine	Dioxathion
Azinphos methyl	Mirex
Barbamate	Sulfoxide
Demeton (mixed isomers)	Sulfallate
Dichlone	Trifluralin

M-8270-17 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 7 comps.

Brominal	Dinocap
Captafol	Fluchloralin
Captan	Nitrofen
Dinex	

Carbamates/Pesticides

M-8270-18 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 6 comps.

Carbaryl	Mexacarbate
Carbofuran	Schradan (Octamethylpyrophosphoramide)
Ethyl carbamate	Phenobarbital

Pesticides

M-8270-19 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 12 comps.

Carbophenothion	Leptophos
Coumaphos	Malathion
EPN	Phosalone
Ethion	Imidan (Phosmet)
Fensulfthion	Terbufos
Fenthion	Tetrachlorvinphos

M-8270-20 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 9 comps.

Chlorfenvinphos	Monocrotophos
Ciodrin (Crotoxyphos)	Naled
Dichlorvos	Phosphamidon
Dicrotophos	TEPP (Tetraethyl pyrophosphate)
Mevinphos	

Azo Dye

RAC-12-10X 1 x 1 mL
1.0 mg/mL in CH₂Cl₂
3,3'-Dimethoxybenzidine

Pesticide Mix

Z-014C-R 1 x 1 mL
Z-014C-R-PAK 5 x 1 mL
2.0 mg/mL each in Toluene:Hexane (50:50) 20 comps.

Aldrin	Dieldrin
α-BHC	Endosulfan I
β-BHC	Endosulfan II
γ-BHC	Endosulfan sulfate
δ-BHC	Endrin
α-Chlordane	Endrin aldehyde
γ-Chlordane	Endrin ketone
4,4'-DDD	Heptachlor
4,4'-DDE	Heptachlor epoxide
4,4'-DDT	Methoxychlor

* ColdPAK required to maintain integrity of product.

EPA Method 8000 Series

Ready-to-Inject Working Level Semi-Volatile Standards



Method 8270

Method 8270C/D 5 point Semi-Volatile Calibration Curve

AccuStandard provides a 5 point semi-volatile calibration curve in 2 formats. One calibration curve already incorporates the internal standards in each level of the curve. To begin analysis, the chemist just cracks the ampule open and transfers the content to the autosampler vial. The second semi-volatile curve does not contain the internal standard.

The analytical chemist will need to add 10 µL of internal standard to each level of the curve and the environmental samples as the vials are placed on the GC/MS. We offer both types of curves to meet your laboratory's preference regarding the addition of internal standards.

Target Analytes (Semi-Volatiles)

Acenaphthene	Carbazole	Di- <i>n</i> -butyl phthalate	bis(2-Ethylhexyl)phthalate	Nitrobenzene
Acenaphthylene	4-Chloroaniline	1,2-Dichlorobenzene	Fluoranthene	2-Nitrophenol
Aniline	bis(2-Chloroethoxy)methane	1,3-Dichlorobenzene	Fluorene	4-Nitrophenol
Anthracene	bis(2-Chloroethyl) ether	1,4-Dichlorobenzene	Hexachlorobenzene	N-Nitrosodimethylamine
Azobenzene	bis(2-Chloro-1-methylethyl) ether	3,3'-Dichlorobenzidine	Hexachlorobutadiene	N-Nitrosodiphenylamine
Benz[a]anthracene	4-Chloro-3-methylphenol	2,4-Dichlorophenol	Hexachlorocyclopentadiene	N-Nitrosodi- <i>n</i> -propylamine
Benidine	2-Chloronaphthalene	Diethyl phthalate	Hexachloroethane	Pentachlorophenol
Benzo[b]fluoranthene	2-Chlorophenol	2,4-Dimethylphenol	Indeno[1,2,3- <i>cd</i>]pyrene	Phenanthrene
Benzo[k]fluoranthene	4-Chlorophenyl phenyl ether	Dimethyl phthalate	Isophorone	Phenol
Benzoic acid	Chrysene	4,6-Dinitro-2-methylphenol	2-Methylnaphthalene	Pyrene
Benzo[g,h,i]perylene	<i>o</i> -Cresol	2,4-Dinitrophenol	Naphthalene	Pyridine
Benzo[a]pyrene	<i>p</i> -Cresol	2,4-Dinitrotoluene	2-Nitroaniline	1,2,4-Trichlorobenzene
Benzyl alcohol	Dibenz[a,h]anthracene	2,6-Dinitrotoluene	3-Nitroaniline	2,4,5-Trichlorophenol
4-Bromophenyl phenyl ether	Dibenzofuran	Di- <i>n</i> -octyl phthalate	4-Nitroaniline	2,4,6-Trichlorophenol
Butyl benzyl phthalate				

Internal Standard Analytes

Acenaphthene- <i>d</i> ₁₀	Naphthalene- <i>d</i> ₈
Chrysene- <i>d</i> ₁₂	Perylene- <i>d</i> ₁₂
1,4-Dichlorobenzene- <i>d</i> ₄	Phenanthrene- <i>d</i> ₁₀

Surrogates Analytes

2-Fluorobiphenyl	Phenol- <i>d</i> ₅
2-Fluorophenol	<i>p</i> -Terphenyl- <i>d</i> ₁₄
Nitrobenzene- <i>d</i> ₅	2,4,6-Tribromophenol

Working Level Semi-Volatiles Curve

With Internal Standards

M-8270-CAL-IS-SET

All solutions in CH₂Cl₂

5 x 1 mL
83 comps.

Components (units in µg/mL)	Level 1	Level 2 (2.5X)	Level 3 (4X)	Level 4 (6X)	Level 5 (8X)
Target Analytes	20	50	80	120	160
Surrogate Analytes	20	50	80	120	160
Internal Analytes	40	40	40	40	40

Level 2 Daily QC Working Level

CCC (with Internal Standard)

M-8270-IS-WL-2.5X-5ML

1 x 5 mL

M-8270-IS-WL-2.5X-10ML

1 x 10 mL

At stated conc. in CH₂Cl₂

Technical Note

2,4-Dinitrophenol, 4-nitrophenol, and pentachlorophenol are susceptible to adsorption on active surfaces found in injection ports or contaminated columns.

Working Level Semi-Volatiles Curve

Without Internal Standards

M-8270-CAL-SET

All solutions in CH₂Cl₂

5 x 1 mL
77 comps.

Components (units in µg/mL)	Level 1	Level 2 (2.5X)	Level 3 (4X)	Level 4 (6X)	Level 5 (8X)
Target Analytes	20	50	80	120	160
Surrogate Analytes	20	50	80	120	160

Level 2 Daily QC Working Level

CCC (without Internal Standard)

M-8270-WL-2.5X-5ML

1 x 5 mL

M-8270-WL-2.5X-10ML

1 x 10 mL

At stated conc. in CH₂Cl₂





EPA Method 8000 Series

Ready-to-Inject Working Level Semi-Volatile Standards

Method 8270C/D (Continued)

Matrix Spike (SW 846)

CLP-007-WL-50ML

At stated conc. in MeOH

1 x 50 mL

11 comps.

4-Chloro-3-methyl phenol (200 µg/mL)	1,4-Dichlorobenzene (100 µg/mL)
2-Chlorophenol (200 µg/mL)	2,4-Dinitrotoluene (100 µg/mL)
4-Nitrophenol (200 µg/mL)	N-Nitrosodi- <i>n</i> -propylamine (100 µg/mL)
Pentachlorophenol (200 µg/mL)	Pyrene (100 µg/mL)
Phenol (200 µg/mL)	1,2,4-Trichlorobenzene (100 µg/mL)
Acenaphthene (100 µg/mL)	

Prep Note

To help maximize instrument performance, add 10 µL of internal standard to a 1 mL sample extract.

Internal Standard

Z-014J

Z-014J-PAK

4.0 mg/mL each in CH₂Cl₂

SAVE

1 x 1 mL

5 x 1 mL

6 comps.

Acenaphthene-d ₁₀	Naphthalene-d ₈
Chrysene-d ₁₂	Perylene-d ₁₂
1,4-Dichlorobenzene-d ₄	Phenanthrene-d ₁₀

Benzidine Solution

M-625C-1-40X

2.0 mg/mL in CH₂Cl₂

1 x 1 mL

Benzidine

GC/MS Tuning Solution

M-625-TS

M-625-TS-PAK

50 µg/mL each in CH₂Cl₂

SAVE

1 x 1 mL

5 x 1 mL

4 comps.

Benzidine	DFTPP
p,p'-DDT	Pentachlorophenol

DFTPP GC/MS Tuning Solution

M-625C-3

M-625C-3-PAK

25 µg/mL in CH₂Cl₂

SAVE

1 x 1 mL

5 x 1 mL

Decafluorotriphenylphosphine (DFTPP)

Technical Note

Benzidine and 3,3'-Dichlorobenzidine are easily oxidized and are light sensitive.

Matrix Spike (3/90 SOW)

CLP-007R-WL-50ML

At stated conc. in MeOH

1 x 50 mL

11 comps.

4-Chloro-3-methyl phenol (150 µg/mL)	1,4-Dichlorobenzene (100 µg/mL)
2-Chlorophenol (150 µg/mL)	2,4-Dinitrotoluene (100 µg/mL)
4-Nitrophenol (150 µg/mL)	N-Nitrosodi- <i>n</i> -propylamine (100 µg/mL)
Pentachlorophenol (150 µg/mL)	Pyrene (100 µg/mL)
Phenol (150 µg/mL)	1,2,4-Trichlorobenzene (100 µg/mL)
Acenaphthene (100 µg/mL)	

Method 8270 Surrogate Spiking Solutions

M-8270-SS-R-WL-PAK

M-8270-SS-R-WL-VAP

At stated conc. in CH₂Cl₂:MeOH (80:20)

5 x 10 mL

10 x 10 mL

6 comps.

2-Fluorobiphenyl (100 µg/mL)	Phenol-d ₅ (200 µg/mL)
2-Fluorophenol (200 µg/mL)	Terphenyl-d ₁₄ (100 µg/mL)
Nitrobenzene-d ₅ (100 µg/mL)	2,4,6-Tribromophenol (200 µg/mL)

M-8270-SS-R

M-8270-SS-R-PAK

At stated conc. in CH₂Cl₂:MeOH (80:20)

SAVE

1 x 1 mL

5 x 1 mL

6 comps.

2-Fluorobiphenyl (1000 µg/mL)	Phenol-d ₅ (2000 µg/mL)
2-Fluorophenol (2000 µg/mL)	Terphenyl-d ₁₄ (1000 µg/mL)
Nitrobenzene-d ₅ (1000 µg/mL)	2,4,6-Tribromophenol (2000 µg/mL)

Prep Note

To ensure extraction efficiency add, 1 mL of Surrogate to the sample.

CLP Surrogate Spiking Solution

CLP-031-R-WL-25ML

CLP-031-R-WL-50ML

At stated conc. in MeOH

1 x 25 mL

1 x 50 mL

8 comps.

2-Chlorophenol-d ₄ (150 µg/mL)	Nitrobenzene-d ₅ (100 µg/mL)
1,2-Dichlorobenzene-d ₄ (100 µg/mL)	Phenol-d ₅ (150 µg/mL)
2-Fluorobiphenyl (100 µg/mL)	<i>p</i> -Terphenyl-d ₁₄ (100 µg/mL)
2-Fluorophenol (150 µg/mL)	2,4,6-Tribromophenol (150 µg/mL)

Technical Note

We have found that benzidine degrades in multi-component semi-volatile solutions. Therefore the benzidine in any calibration curve should be used as a qualitative retention time marker. Reported hits for benzidine should be quantitatively determined by analyzing a single benzidine solution or by using the benzidine response observed in the Daily GC/MS tuning solution.

EPA Method 8000 Series

Alternate Source Line (ASL)



AccuStandard formulated the **M-8270-ASL-SET** with convenient mixtures based on similar analytical or functional group characteristics. Should your semi-volatile calibration table have additional required analytes, we can easily manufacture specific formulations.

M-8270-ASL-SET		Alternate Source		Alternate Source Method 8270C/D Set		17 x 1 mL	
M-8270-01-ASL	Ethers & Phthalates Mix			M-8270-08-ASL	Phenols Mix	The set includes the following 17 products	
M-8270-02-ASL	Chlorinated Hydrocarbons Mix			M-8270-09-ASL	Organochlorine Pesticide Mix	Z-014J	Internal Standards Mix
M-8270-03-ASL	Nitrosamines Mix			M-8270-10-ASL	Pesticide Mix	CLP-BNS	Base/Neutrals Surrogate Standard
M-8270-04-ASL	Base/Neutrals Mix			M-8270-11-ASL	Toxic Substances Mix	CLP-AS	Acid Surrogate Standard
M-8270-05-ASL	Base/Neutrals Mix			M-8270-12-ASL	Phenols Mix		
M-8270-06-ASL	PAH Mix			M-8270-13-ASL	Polynuclear Aromatic Hydrocarbon Mix		
M-8270-07-ASL	Pyridines Mix			M-8270-14-ASL	Organochlorine Pesticide Mix		

ASL Method 8270C/D Alternate Method 8270 Formulations

Ethers & Phthalates Mix

M-8270-01-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	11 comps.
bis(2-Chloroethoxy)methane	4-Chlorophenyl phenyl ether
bis(2-Chloroethyl)ether	Diethyl phthalate
bis(2-Ethylhexyl)phthalate	Dimethyl phthalate
bis(2-Chloro-1-methylethyl)ether	Dibutyl phthalate
4-Bromophenyl phenyl ether	Di-n-octyl phthalate
Benzyl butyl phthalate	

Chlorinated Hydrocarbons Mix

M-8270-02-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	13 comps.
2-Chloronaphthalene	Hexachloroethane
1,2-Dichlorobenzene	Hexachloropropene
1,3-Dichlorobenzene	Pentachlorobenzene
1,4-Dichlorobenzene	Pentachloroethane
Hexachlorobenzene	1,2,4,5-Tetrachlorobenzene
Hexachlorobutadiene	1,2,4-Trichlorobenzene
Hexachlorocyclopentadiene	

Nitrosamines Mix

M-8270-03-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	9 comps.
N-Nitrosodi-n-butylamine	N-Nitrosomethylethylamine
N-Nitrosodiethylamine	N-Nitrosomorpholine
N-Nitrosodimethylamine	N-Nitrosopiperidine
N-Nitrosodiphenylamine	N-Nitrosopyrrolidine
N-Nitrosodi-n-propylamine	

Base/Neutrals Mix

M-8270-04-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	13 comps.
2-Acetylaminofluorene	1-Naphthylamine
4-Aminobiphenyl	2-Naphthylamine
3,3'-Dichlorobenzidine	5-Nitro-o-toluidine
4-Dimethylaminoazobenzene	Phenacetin
3,3'-Dimethylbenzidine	p-Phenylenediamine
α,α-Dimethylphenethylamine	o-Toluidine
Diphenylamine	

Base/Neutrals Mix

M-8270-05-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	13 comps.
Acetophenone	Methyl methanesulfonate
1,3-Dinitrobenzene	1,4-Naphthoquinone
2,4-Dinitrotoluene	Nitrobenzene
2,6-Dinitrotoluene	Pentachloronitrobenzene
Ethyl methanesulfonate	Safrole
Isophorone	1,3,5-Trinitrobenzene
Isosafrole	

PAH Mix

M-8270-06-ASL	1 x 1 mL
2.0 mg/mL each CH ₂ Cl ₂ :Benzene (50:50)	2 comps.
7,12-Dimethylbenz[a]anthracene	
3-Methylcholanthrene	

Pyridine Mix

M-8270-07-ASL	1 x 1 mL
2.0 mg/mL each in Acetone	4 comps.
Methapyrilene	2-Picoline
4-Nitroquinoline-1-oxide	Pyridine

Phenol Mix

M-8270-08-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	8 comps.
o-Cresol	Dinoseb
m-Cresol	Hexachlorophene
p-Cresol	2,3,4,6-Tetrachlorophenol
2,6-Dichlorophenol	2,4,5-Trichlorophenol

Organophosphorous Pesticide Mix

M-8270-09-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	9 comps.
Dimethoate	o,o,o-Triethylphosphorothioate
Disulfoton	Methyl parathion
Famphur	Parathion
Thionazin	Phorate
Sulfotep	

Pesticide Mix

M-8270-10-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	6 comps.
Aramite	Isodrin
Chlorobenzilate	Kepone
Diallate	Pronamide

Toxic Substance Mix

M-8270-11-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	8 comps.
Aniline	2-Methylnaphthalene
Benzyl alcohol	2-Nitroaniline
4-Chloroaniline	3-Nitroaniline
Dibenzofuran	4-Nitroaniline

Internal Standard Mix

Z-014J	1 x 1 mL
Z-014J-PAK	5 x 1 mL
4.0 mg/mL each in CH ₂ Cl ₂	6 comps.
Acenaphthene-d ₁₀	Naphthalene-d ₈
Chrysene-d ₁₂	Perylene-d ₁₂
1,4-Dichlorobenzene-d ₄	Phenanthrene-d ₁₀

Alternate Method 8270C/D Formulations continued on the next page



EPA Method 8000 Series

Alternate Source Line (ASL)

ASL Method 8270C/D Semi-Volatiles by GC/MS Alternate Method 8270 Formulations (Continued)

Alternate Source

Acid Surrogate Standard

CLP-AS	1 x 1 mL
CLP-AS-PAK	5 x 1 mL
2.0 mg/mL each in MeOH	3 comps.
2-Fluorophenol	2,4,6-Tribromophenol
Phenol-d ₅	

Base/Neutrals Surrogate Standard

CLP-BNS	1 x 1 mL
CLP-BNS-PAK	5 x 1 mL
1.0 mg/mL each in CH ₂ Cl ₂	3 comps.
2-Fluorobiphenyl	p-Terphenyl-d ₁₄
Nitrobenzene-d ₅	

Phenol Mixture

M-8270-12-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	11 comps.
4-Chloro-3-methylphenol	2-Nitrophenol
2-Chlorophenol	4-Nitrophenol
2,4-Dichlorophenol	Pentachlorophenol
2,4-Dimethylphenol	Phenol
2,4-Dinitrophenol	2,4,6-Trichlorophenol
2-Methyl-4,6-dinitrophenol	

These additional formulations, used in conjunction with the ASL 8270C/D formulations and designed on a functional group basis, will allow the chemist to analyze a complete method 8270C/D.

Additions to Method 8270

M-8270-13A-R2	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	10 comps.
4-aminoazobenzene	2,4-Diaminotoluene
3-Amino-9-ethylcarbazole	4,4'-Methylenebis(N,N-dimethylaniline)
o-Anisidine	4,4'-Methylenebis(2-chloroaniline)
5-Chloro-2-methylaniline	4,4'-Oxydianiline
p-Cresidine	2,4,5-Trimethylaniline

M-8270-13B-R	1 x 1 mL
2.0 mg/mL each in THF	3 comps.
2-Aminoanthraquinone	4-Chloro-1,3-phenylenediamine
4-Chloro-1,2-phenylenediamine	

M-8270-14A-R1	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	7 comps.
Benzoic acid	Thiophenol
1-Chloronaphthalene	tris-(2,3-Dibromopropyl)phosphate
Dibenz[a,j]acridine	Tri-p-tolyl phosphate
Resorcinol	

M-8270-14B	1 x 1 mL
2.0 mg/mL each in THF	5 comps.
p-Benzoquinone	Phthalic anhydride
Hydroquinone	Trimethyl phosphate
Maleic anhydride	

M-8270-14C *	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂ :MeOH (75:25)	5 comps.
1-Acetyl-2-thiourea	3-Picolyl chloride HCL
Diethyl sulfate	Toluene diisocyanate
Hexamethylphosphoramide	

Polynuclear Aromatic Hydrocarbon Mixture

M-8270-13-ASL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂ :Benzene (50:50)	16 comps.
Acenaphthene	Chrysene
Acenaphthylene	Dibenz[a,h]anthracene
Anthracene	Fluoranthene
Benz[a]anthracene	Fluorene
Benzo[a]pyrene	Indeno[1,2,3-cd]pyrene
Benzo[b]fluoranthene	Naphthalene
Benzo[g,h,i]perylene	Phenanthrene
Benzo[k]fluoranthene	Pyrene

Organochlorine Pesticide Mix

M-8270-14-ASL	1 x 1 mL
2.0 mg/mL each in Acetone	17 comps.
Aldrin	Endosulfan I
α-BHC	Endosulfan II
β-BHC	Endosulfan sulfate
δ-BHC	Endrin
γ-BHC	Endrin aldehyde
4,4'-DDD	Heptachlor
4,4'-DDE	Heptachlor epoxide
4,4'-DDT	Methoxychlor
Dieldrin	

M-8270-15	1 x 1 mL
1.0 mg/mL each in CH ₂ Cl ₂ :MeOH (90:10)	13 comps.
Dibenzo[a,e]pyrene	Nicotine
1,2-Dibromo-3-chloropropane	5-Nitroacenaphthene
Diethyl stilbestrol	5-Nitro-o-anisidine
1,2-Dinitrobenzene	4-Nitrobiphenyl
1,4-Dinitrobenzene	Propylthiouracil
5,5-Diphenylhydantoin	Strychnine
Mestranol	

Pesticides

M-8270-16		1 x 1 mL
1000 µg/mL each in CH ₂ Cl ₂		10 comps.
Anilazine	Dichlone	Sulfoxide
Azinphos methyl	Dioxathion	Sulfallate
Barbamate	Mirex	Trifluralin
Demeton (mixed isomers)		

M-8270-17		1 x 1 mL
1000 µg/mL each in CH ₂ Cl ₂		7 comps.
Brominal	Dinex	Fluchloralin
Captafol	Dinocap	Nitrofen
Captan		

Carbamates/Pesticides

M-8270-18	1 x 1 mL
1000 µg/mL each in CH ₂ Cl ₂	6 comps.
Carbaryl	Mexacarbate
Carbofuran	Schradan (Octamethylpyrophosphoramide)
Ethyl carbamate	Phenobarbital

EPA Method 8000 Series

Alternate Source Line (ASL)



ASL Method 8270C/D Semi-Volatiles by GC/MS Alternate Method 8270 Formulations (Continued)

Alternate Source

Pesticides

M-8270-19 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 12 comps.

Carbophenothion	Fensulfothion	Phosalone
Coumaphos	Fenthion	Imidan (Phosmet)
EPN	Leptophos	Terbufos
ETHION	Malathion	Tetrachlorvinphos

M-8270-20 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 9 comps.

Chlorfenvinphos	Dicrotophos	Naled
Ciodrin (Crotoxyphos)	Mevinphos	Phosphamidon
Dichlorvos	Monocrotophos	TEPP (Tetraethyl pyrophosphate)

M-8270-21 1 x 1 mL
2.0 mg/mL each in Acetone 3 comps.

α-Chlordane	Endrin ketone
γ-Chlordane	

Semi-Volatile additions

M-8270-22 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 2 comps.

Benzydine	3,3'-Dimethoxybenzidine
-----------	-------------------------

APP-9-126-10X 1 x 1 mL
1.0 mg/mL in CH₂Cl₂

Methapyrilene

P-427S-10X 1 x 1 mL
1.0 mg/mL in MeOH

Dinex

ASL Method 8270C/D Appendix IX Semi-Volatiles by Method 8270

Alternate Source

The following formulations allow the analytical chemist to combine more analytes at one time in the development of a Method 8270C/D calibration curve. Use of these Alternate Source standards allow you to check product comparability from an independent source. AccuStandard has formulated the necessary additional standards required to have the most complete 8270C/D analyte list in the industry.

8270 Semi-Volatile Standards

M-8270-AG01-ASL 1 x 1 mL
1000 µg/mL each in CH₂Cl₂:Benzene (75:25) 64 comps.

Acenaphthene	2,4-Dinitrophenol
Acenaphthylene	Dimethyl phthalate
Anthracene	2,4-Dinitrotoluene
Azobenzene	2,6-Dinitrotoluene
Benz[a]anthracene	Di- <i>n</i> -octyl phthalate
Benzo[a]pyrene	Fluoranthene
Benzo[b]fluoranthene	Fluorene
Benzo[g,h,i]perylene	Hexachlorobenzene
Benzo[k]fluoranthene	Hexachlorobutadiene
Benzyl butyl phthalate	Hexachlorocyclopentadiene
bis(2-Chloroethoxy)methane	Hexachloroethane
bis(2-Chloroethyl)ether	Indeno[1,2,3- <i>cd</i>]pyrene
bis(2-Chloro-1-methylethyl)ether	Isophorone
bis(2-Ethylhexyl)phthalate	2-Methylnaphthalene
4-Bromophenyl phenyl ether	2-Methylphenol
Carbazole	4-Methylphenol
4-Chloroaniline	Naphthalene
2-Chloronaphthalene	2-Nitroaniline
4-Chloro-3-methylphenol	3-Nitroaniline
2-Chlorophenol	4-Nitroaniline
4-Chlorophenyl phenyl ether	Nitrobenzene
Chrysene	2-Nitrophenol
Dibenz[a,h]anthracene	4-Nitrophenol
Dibenzofuran	<i>n</i> -Nitrosodimethylamine
Dibutyl phthalate	<i>N</i> -Nitrosodi- <i>n</i> -propylamine
1,2-Dichlorobenzene	Pentachlorophenol
1,3-Dichlorobenzene	Phenanthrene
1,4-Dichlorobenzene	Phenol
2,4-Dichlorophenol	Pyrene
Diethyl phthalate	1,2,4-Trichlorobenzene
2,4-Dimethylphenol	2,4,5-Trichlorophenol
4,6-Dinitro-2-methylphenol	2,4,6-Trichlorophenol

M-8270-AG02-ASL 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 39 comps.

Aniline	4-Nitroquinoline-N-oxide
Acetophenone	<i>N</i> -Nitrosodi- <i>n</i> -butylamine
2-Acetamidofluorene	<i>N</i> -Nitrosodiethylamine
4-Aminobiphenyl	<i>N</i> -Nitrosomethylethylamine
Benzyl alcohol	<i>N</i> -Nitrosomorpholine
2,6-Dichlorophenol	<i>N</i> -Nitrosopiperidine
4-Dimethylaminoazobenzene	<i>N</i> -Nitrosopyrrolidine
7,12-Dimethylbenz[a]anthracene	5-Nitro- <i>o</i> -toluidine
1,3-Dinitrobenzene	Pentachlorobenzene
Dinoseb	Pentachloronitrobenzene
Diphenylamine	Pentachloroethane
Ethyl methanesulfonate	Phenacetin
Hexachloropropene	2-Picoline
Isosafrole	Pyridine
Methapyrilene	Safrole
3-Methylcholanthrene	1,2,4,5-Tetrachlorobenzene
Methyl methanesulfonate	2,3,4,6-Tetrachlorophenol
3-Methylphenol	1,3,5-Trinitrobenzene
1-Naphthylamine	<i>o</i> -Toluidine
2-Naphthylamine	



EPA Method 8000 Series

Alternate Source Line (ASL)

ASL Method 8270C/D Semi-Volatiles by GC/MS Alternate Method 8270 Formulations (Continued)

Alternate **Source**

M-8270-07 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 15 comps.

Aramite	Dinoseb	Parathion
Chlorobenzilate	Disulfoton	Phorate
Diallate	Famphur	Silvex (2,4,5-TP)
2,4-D	Kepone	Sulfotep
Dimethoate	Methyl parathion	Thionazin

Additions to Method 8270

M-8270-13A-R 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 12 comps.

4-Aminoazobenzene	4,4'-Methylenebis(N,N-dimethylaniline)
3-Amino-9-ethylcarbazole	4,4'-Methylene bis(2-chloroaniline)
<i>o</i> -Anisidine	4,4'-Oxydianiline
5-Chloro-2-methylaniline	2-Picoline
<i>p</i> -Cresidine	Pyridine
2,4-Diaminotoluene	2,4,5-Trimethylaniline

M-8270-13B-R 1 x 1 mL
2.0 mg/mL each in THF 3 comps

2-Aminoanthraquinone	4-Chloro-1,3-phenylenediamine
4-Chloro-1,2-phenylenediamine	

M-8270-14A-R1 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 7 comps.

Benzoic acid	Thiophenol
1-Chloronaphthalene	tris-(2,3-Dibromopropyl)phosphate
Dibenz[a,j]acridine	Tri- <i>p</i> -tolyl phosphate
Resorcinol	

M-8270-14B 1 x 1 mL
2.0 mg/mL each in THF 5 comps.

<i>p</i> -Benzoquinone	Phthalic anhydride
Hydroquinone	Trimethyl phosphate
Maleic anhydride	

M-8270-14C 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂:MeOH (75:25) 5 comps.

1-Acetyl-2-thiourea	3-Picolyl chloride HCL
Diethyl sulfate	Toluene diisocyanate
Hexamethylphosphoramide	

M-8270-15 1 x 1 mL
1.0 mg/mL each in CH₂Cl₂:MeOH (90:10) 13 comps.

Dibenzo[a,e]pyrene	Nicotine
1,2-Dibromo-3-chloropropane	5-Nitroacenaphthene
Diethyl stilbestrol	5-Nitro- <i>o</i> -anisidine
1,2-Dinitrobenzene	4-Nitrobiphenyl
1,4-Dinitrobenzene	Propylthiouracil
5,5-Diphenylhydantoin	Strychnine
Mestranol	

Pesticides

M-8270-16 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 10 comps.

Anilazine	Dichlone	Sulfoxide
Azinphos methyl	Dioxathion	Sulfallate
Barbamate	Mirex	Trifluralin
Demeton (mixed isomers)		

M-8270-17 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 7 comps.

Brominal	Dinex	Fluchloralin
Captafol	Dinocap	Nitrofen
Captan		

Carbamates/Pesticides

M-8270-18 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 6 comps.

Carbaryl	Mexacarbate
Carbofuran	Schradan (Octamethylpyrophosphoramidate)
Ethyl carbamate	Phenobarbital

Pesticides

M-8270-19 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 12 comps.

Carbophenothion	Fensulfothion	Phosalone
Coumaphos	Fenthion	Imidan (Phosmet)
EPN	Leptophos	Terbufos
Ethion	Malathion	Tetrachlorvinphos

M-8270-20 1 x 1 mL
1000 µg/mL each in CH₂Cl₂ 9 comps.

Chlorfenvinphos	Monocrotophos
Ciodrin (Crotoxyphos)	Naled
Dichlorvos	Phosphamidon
Dicrotophos	TEPP (Tetraethyl pyrophosphate)
Mevinphos	

Semi-Volatile additions

M-8270-22 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 2 comps.

Benzidine	3,3'-Dimethoxybenzidine
-----------	-------------------------

Pesticides - Mix #2

Z-014C-R 1 x 1 mL
Z-014C-R-PAK 5 x 1 mL
2.0 mg/mL each in Toluene:Hexane (50:50) 20 comps.

SAVE

Aldrin	4,4'-DDD	Endrin
α-BHC	4,4'-DDE	Endrin aldehyde
β-BHC	4,4'-DDT	Endrin ketone
γ-BHC	Dieldrin	Heptachlor
δ-BHC	Endosulfan I	Heptachlor epoxide
α-Chlordane	Endosulfan II	Methoxychlor
γ-Chlordane	Endosulfan sulfate	

Semi-Volatile additions

M-8270-23-R1 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 4 comps.

3,3'-Dichlorobenzidine	<i>a,a</i> -Dimethylphenethylamine
3,3'-Dimethylbenzidine	<i>p</i> -Phenylenediamine

M-8270-24 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂ 4 comps

Hexachlorophene	Pronamide
Isodrin	<i>o,o,o</i> -Triethylphosphorothioate

AS-E0060 1 x 1 mL
5.0 mg/mL in MeOH

N-Nitrosodiphenylamine

Method 8272 PAHs (GC/MS)

M-8272			1 x 1 mL
<i>At stated conc. in Dichloromethane</i>			12 comps.
Naphthalene	42	Anthracene	0.6
1-Methylnaphthalene	24	Phenanthrene	5.5
2-Methylnaphthalene	20	Fluoranthene	2.1
Acenaphthylene	9	Pyrene	1.8
Acenaphthene	11	Benz(a)anthracene	0.08
Fluorene	7.6	Chrysene	0.03

Internal Standard - Deuterated Analogs

M-8272-IS			1 x 1 mL
<i>At stated conc. in Acetone</i>			8 comps.
Naphthalene-d ₈	5	Phenanthrene-d ₁₀	0.96
1-Methylnaphthalene-d ₁₀	6	Fluoranthene-d ₁₀	0.93
Acenaphthene-d ₁₀	1.2	Perylene-d ₁₂	0.84
Fluorene-d ₁₀	1.2	Chrysene-d ₁₂	0.033

Method 8275A (Thermal Extraction/GC/FID/MS) Semi-Volatiles by Thermal Chromatography

Semi-Volatiles

M-8275			1 x 1 mL
<i>1.0 mg/mL each in Acetone</i>			17 comps.
Aldrin		2,4-Dinitrotoluene	
Benzo[k]fluoranthene		Diphenylamine	
Benzo[a]pyrene		Fluorene	
Carbazole		Hexachlorobenzene	
4-Chloro-3-methylphenol		4-Methylphenol	
1-Chloronaphthalene		Naphthalene	
2-Chlorophenol		Phenanthrene	
Dibenzothiophene		Pyrene	
2,4-Dichlorophenol			

Internal Standard

Z-014J			1 x 1 mL
Z-014J-PAK	SAVE		5 x 1 mL
<i>4.0 mg/mL each in CH₂Cl₂</i>			6 comps.
Acenaphthene-d ₁₀		Naphthalene-d ₈	
Chrysene-d ₁₂		Perylene-d ₁₂	
1,4-Dichlorobenzene-d ₄		Phenanthrene-d ₁₀	

Buy AccuPAKs™
Save 20-40% 5 x 1 mL



Method 8280A Dioxins & Furans by HRGC/LRMS

Dioxin Mixture

M-8280A			1 x 1 mL
M-8280A-PAK	SAVE		5 x 1 mL
<i>5 µg/mL each in Toluene</i>			5 comps.
2,3,7,8-Tetrachlorodibenzo-p-dioxin		1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	
1,2,3,7,8-Pentachlorodibenzo-p-dioxin		Octachlorodibenzo-p-dioxin	
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin			

Furan Mixture

M-8280B			1 x 1 mL
M-8280B-PAK	SAVE		5 x 1 mL
<i>5 µg/mL each in Toluene</i>			5 comps.
2,3,7,8-Tetrachlorodibenzofuran		1,2,3,4,6,7,8-Heptachlorodibenzofuran	
1,2,3,7,8-Pentachlorodibenzofuran		Octachlorodibenzofuran	
1,2,3,4,7,8-Hexachlorodibenzofuran			

Column Performance Check

M-8280-CPC			1 x 1 mL
<i>5 µg/mL each in Toluene</i>			7 comps.
1,2,3,4-Tetrachlorodibenzo-p-dioxin		1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	
2,3,7,8-Tetrachlorodibenzo-p-dioxin		1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	
1,2,3,4,7-Pentachlorodibenzo-p-dioxin		2,3,7,8-Tetrachlorodibenzofuran	
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin			

Canadian Environmental Method Multi-Component Dioxin Mixtures

Custom Window Defining Mixture

D-WD	20,000 ng/mL in Toluene	1 x 1 mL
D-WD-2.5X	50,000 ng/mL in Toluene	1 x 1 mL
		7 comps.
1,2,4,6,8/1,2,4,7,9-Pentachlorodibenzo-p-dioxin (Isomer pair)		
1,2,3,8,9-Pentachlorodibenzo-p-dioxin		
1,2,4,6,7,9/1,2,4,6,8,9-Hexachlorodibenzo-p-dioxin (Isomer pair)		
1,2,3,4,6,7-Hexachlorodibenzo-p-dioxin		
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin		
1,2,3,4,6,7,9-Heptachlorodibenzo-p-dioxin		
Octachlorodibenzo-p-dioxin		

Formulations at Highest Conc. for Economical Prices

Custom Calibration Mixture

D-CAL	20,000 ng/mL in Toluene	1 x 1 mL
D-CAL-2.5X	50,000 ng/mL in Toluene	1 x 1 mL
		6 comps.
1,2,3,7,8-Pentachlorodibenzo-p-dioxin		
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin		
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin		
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin		
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin		
Octachlorodibenzo-p-dioxin		

Column Performance Check

M-8280-CPC			1 x 1 mL
<i>5.0 µg/mL each in Toluene</i>			7 comps.
1,2,3,4-Tetrachlorodibenzo-p-dioxin			
2,3,7,8-Tetrachlorodibenzo-p-dioxin			
1,2,3,4,7-Pentachlorodibenzo-p-dioxin			
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin			
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin			
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin			
2,3,7,8-Tetrachlorodibenzofuran			

Standards of Interest

For more Canadian Methods see the Regional Section of this catalog



EPA Method 8000 Series

Method 8310 PAHs by HPLC

PAH Mixture

M-8310		1 x 1 mL
M-8310-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in AcCN		16 comps.

Acenaphthene	Chrysene
Acenaphthylene	Dibenz[a,h]anthracene
Anthracene	Fluoranthene
Benz[a]anthracene	Fluorene
Benzo[a]pyrene	Indeno[1,2,3-cd]pyrene
Benzo[b]fluoranthene	Naphthalene
Benzo[g,h,i]perylene	Phenanthrene
Benzo[k]fluoranthene	Pyrene

PAH Quality Control Calibration Mixture

M-610-QC	1 x 1 mL
At stated conc. in AcCN	16 comps.

Acenaphthene (0.1 mg/mL)	Chrysene (0.01 mg/mL)
Acenaphthylene (0.1 mg/mL)	Dibenz[a,h]anthracene (0.01 mg/mL)
Anthracene (0.1 mg/mL)	Fluoranthene (0.01 mg/mL)
Benzo[a]anthracene (0.01 mg/mL)	Fluorene (0.1 mg/mL)
Benzo[a]pyrene (0.01 mg/mL)	Indeno[1,2,3-cd]pyrene (0.01 mg/mL)
Benzo[b]fluoranthene (0.01 mg/mL)	Naphthalene (0.1 mg/mL)
Benzo[g,h,i]perylene (0.01 mg/mL)	Phenanthrene (0.1 mg/mL)
Benzo[k]fluoranthene (0.005 mg/mL)	Pyrene (0.01 mg/mL)

Surrogate Standard

M-8310-SS	1 x 1 mL
M-8310-SS-PAK	5 x 1 mL
0.1 mg/mL in Acetonitrile	
Decafluorobiphenyl	

Internal Standard Post Supercritical Fluid Extraction

M-8310-SFE-IS-100X	1 x 1 mL
M-8310-SFE-IS-100X-PAK	5 x 1 mL
20,000 µg/mL in AcCN:THF (50:50)	
Biphenyl	

Florida Method PAH Mixture

Z-014G-FL	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂ :Benzene (50:50)	
18 comps.	

Acenaphthene	Dibenz[a,h]anthracene
Acenaphthylene	Fluoranthene
Anthracene	Fluorene
Benz[a]anthracene	Indeno[1,2,3-cd]pyrene
Benzo[a]pyrene	Naphthalene
Benzo[b]fluoranthene	Phenanthrene
Benzo[g,h,i]perylene	Pyrene
Benzo[k]fluoranthene	1-Methylnaphthalene
Chrysene	2-Methylnaphthalene

Florida Administrative Code (continued) PAHs by HPLC

Performance Check Solution

M-610-QC-FL	1 x 1 mL
M-610-QC-FL-PAK	5 x 1 mL
At stated conc. in AcCN	
18 comps.	

Acenaphthene (0.1 mg/mL)	Dibenz[a,h]anthracene (0.01 mg/mL)
Acenaphthylene (0.1 mg/mL)	Fluoranthene (0.01 mg/mL)
Anthracene (0.1 mg/mL)	Fluorene (0.1 mg/mL)
Benz[a]anthracene (0.01 mg/mL)	Indeno[1,2,3-cd]pyrene (0.01 mg/mL)
Benzo[a]pyrene (0.01 mg/mL)	1-Methyl naphthalene (0.1 mg/mL)
Benzo[b]fluoranthene (0.01 mg/mL)	2-Methyl naphthalene (0.1 mg/mL)
Benzo[g,h,i]perylene (0.01 mg/mL)	Naphthalene (0.1 mg/mL)
Benzo[k]fluoranthene (0.005 mg/mL)	Phenanthrene (0.1 mg/mL)
Chrysene (0.01 mg/mL)	Pyrene (0.01 mg/mL)

Matrix Spiking Solution

M-610-MS	1 x 1 mL
M-610-MS-PAK	5 x 1 mL
At stated conc. in AcCN	
6 comps.	

Benz[a]pyrene (0.5 mg/mL)	2-Methylnaphthalene (5.0 mg/mL)
Chrysene (0.5 mg/mL)	Phenanthrene (0.5 mg/mL)
1-Methylnaphthalene (5.0 mg/mL)	Pyrene (0.5 mg/mL)

PAH Mix Additions

H-001S/002S-M-20X	1 x 1 mL
1.0 mg/mL each in MeOH	
2 comps.	
1-Methyl naphthalene	2-Methyl naphthalene

Polynuclear Aromatic Hydrocarbons (HPLC)

M-8310-FL	1 x 1 mL
M-8310-FL-PAK	5 x 1 mL
0.5 mg/mL each in AcCN	
18 comps.	
M-8310-FL-SET	18 x 1 mL

Acenaphthene	M-8310-FL-01
Acenaphthylene	M-8310-FL-02
Anthracene	M-8310-FL-03
Benz[a]anthracene	M-8310-FL-04
Benzo[a]pyrene	M-8310-FL-05
Benzo[b]fluoranthene	M-8310-FL-06
Benzo[g,h,i]perylene	M-8310-FL-07
Benzo[k]fluoranthene	M-8310-FL-08
Chrysene	M-8310-FL-09
Dibenz[a,h]anthracene	M-8310-FL-10
Fluoranthene	M-8310-FL-11
Fluorene	M-8310-FL-12
Indeno[1,2,3-cd]pyrene	M-8310-FL-13
1-Methylnaphthalene	M-8310-FL-14
2-Methylnaphthalene	M-8310-FL-15
Naphthalene	M-8310-FL-16
Phenanthrene	M-8310-FL-17
Pyrene	M-8310-FL-18

Polynuclear Aromatic Hydrocarbons (HPLC)

M-8310-QC-ATI	1 x 1 mL
M-8310-QC-ATI-PAK	5 x 1 mL
At stated conc. in AcCN	
18 comps.	

Acenaphthene (1000 µg/mL)	Dibenz[a,h]anthracene (200 µg/mL)
Acenaphthylene (2000 µg/mL)	Fluoranthene (200 µg/mL)
Anthracene (100 µg/mL)	Fluorene (200 µg/mL)
Benz[a]anthracene (100 µg/mL)	Indeno[1,2,3-cd]pyrene (100 µg/mL)
Benzo[a]pyrene (100 µg/mL)	1-Methylnaphthalene (1000 µg/mL)
Benzo[b]fluoranthene (200 µg/mL)	2-Methylnaphthalene (1000 µg/mL)
Benzo[g,h,i]perylene (200 µg/mL)	Naphthalene (1000 µg/mL)
Benzo[k]fluoranthene (100 µg/mL)	Phenanthrene (100 µg/mL)
Chrysene (100 µg/mL)	Pyrene (100 µg/mL)



Method 8315/8315A Ketones/Aldehydes by HPLC

Aldehyde Mixture

M-8315 1 x 1 mL
M-8315-PAK 5 x 1 mL
 1.0 mg/mL each in H₂O **SAVE** 2 comps.

Acetaldehyde Formaldehyde

Aldehyde Individuals

Acetaldehyde (1.0 mg/mL in H₂O) **M-8315-01** 1 x 1 mL
 Formaldehyde (1.0 mg/mL in H₂O) **M-8315-02** 1 x 1 mL

Aldehyde as DNPH Derivatives

M-8315-DNPH-10ML 1 x 10 mL
 1.0 mg/mL each in MeOH 2 comps. as DNPH derivatives
 Acetaldehyde Formaldehyde

Option 1

(Samples Collected from Water, Air, Soil, Waste or Stacks by Method 0011)

Carbonyl Mixture

M-8315-R1 1 x 1 mL
 1.0 mg/mL each in AcCN 12 comps.

Acetaldehyde Heptanal
 Butanal (*Butyraldehyde*) Hexanal (*Hexaldehyde*)
 Crotonaldehyde Nonanal
 Cyclohexanone Octanal
 Decanal Pentanal (*Valeraldehyde*)
 Formaldehyde Propanal (*Propionaldehyde*)

Carbonyl DNPH Derivative Mixture

M-8315-R1-DNPH 1 x 1 mL
 0.1 mg/mL each in AcCN 12 comps. as DNPH derivatives

Acetaldehyde Heptanal
 Butanal (*Butyraldehyde*) Hexanal (*Hexaldehyde*)
 Crotonaldehyde Nonanal
 Cyclohexanone Octanal
 Decanal Pentanal (*Valeraldehyde*)
 Formaldehyde Propanal (*Propionaldehyde*)

Option 2

(Samples Collected from Indoor Air by Method 0100)

Carbonyl Mixture

M-8315-R2 1 x 1 mL
 1.0 mg/mL each in AcCN 15 comps.

Acetaldehyde Hexanal (*Hexaldehyde*)
 Acetone Isovaleraldehyde
 Acrolein Pentanal (*Valeraldehyde*)
 Benzaldehyde Propanal (*Propionaldehyde*)
 Butanal (*Butyraldehyde*) *m*-Tolualdehyde
 Crotonaldehyde *o*-Tolualdehyde
 2,5-Dimethylbenzaldehyde *p*-Tolualdehyde
 Formaldehyde

Carbonyl DNPH Derivative Mixture

M-8315-R2-DNPH 1 x 1 mL
 0.1 mg/mL each in AcCN 15 comps. as DNPH derivatives

Acetaldehyde Hexanal (*Hexaldehyde*)
 Acetone Isovaleraldehyde
 Acrolein Pentanal (*Valeraldehyde*)
 Benzaldehyde Propanal (*Propionaldehyde*)
 Butanal (*Butyraldehyde*) *m*-Tolualdehyde
 Crotonaldehyde *o*-Tolualdehyde
 2,5-Dimethylbenzaldehyde *p*-Tolualdehyde
 Formaldehyde

Carbonyl Compound Set

M-8315-R3-10X-SET 20 x 1 mL
 Each at 1.0 mg/mL in AcCN

Acetaldehyde (01) Heptanal (11)
 Acetone (02) Hexanal (12)
 Acrolein (03) Isovaleraldehyde (13)
 Benzaldehyde (04) Nonanal (14)
 Butanal (05) Octanal (15)
 Crotonaldehyde (06) Pentanal (16)
 Cyclohexanone (07) Propanal (17)
 Decanal (08) *m*-Tolualdehyde (18)
 2,5-Dimethylbenzaldehyde (09) *o*-Tolualdehyde (19)
 Formaldehyde (10) *p*-Tolualdehyde (20)

Carbonyl DNPH Derivative Set

M-8315-R-DNPH-SET 20 x 1 mL
 Each at 0.1 mg/mL in AcCN 20 comps. as DNPH Derivatives

Acetaldehyde (01) Heptanal (11)
 Acetone (02) Hexanal (*Hexaldehyde*) (12)
 Acrolein (03) Isovaleraldehyde (13)
 Benzaldehyde (04) Nonanal (14)
 Butanal (*Butyraldehyde*) (05) Octanal (15)
 Crotonaldehyde (06) Pentanal (*Valeraldehyde*) (16)
 Cyclohexanone (07) Propanal (*Propionaldehyde*) (17)
 Decanal (08) *m*-Tolualdehyde (18)
 2,5-Dimethylbenzaldehyde (09) *o*-Tolualdehyde (19)
 Formaldehyde (10) *p*-Tolualdehyde (20)

Technical Note

For initial Method 8315 development, AccuStandard offers individual analyte sets (20 x 1 mL) for both the Carbonyl compounds and their corresponding DNPH derivatives. Use of these sets will allow the analytical chemist to rapidly establish individual analyte retention times and to troubleshoot possible extraction recovery problems.

Method 8316 Acrolein, Acrylamide, Acrylonitrile by HPLC

M-8316 * 1 x 1 mL
 1.0 mg/mL each in Water 3 comps.

Acrolein Acrylonitrile
 Acrylamide

* ColdPAK required to maintain integrity of product.

Method 8318 N-Methylcarbamates by HPLC

N-Methylcarbamates

M-8318-SET 10 x 1 mL
 Each at 0.1 mg/mL in MeOH

M-8318M 1 x 1 mL
 Mixture, 0.1 mg/mL each in MeOH 10 comps.

Aldicarb (01) 3-Hydroxycarbofuran (06)
 Aldicarb sulfone (02) Methiocarb (07)
 Carbaryl (03) Methomyl (08)
 Carbofuran (04) Promecarb (09)
 Dioxacarb (05) Propoxur (10)



EPA Method 8000 Series

Method 8321 Non-Volatile Compounds by HPLC/TSP/MS or UV Solvent Extractable

Chlorinated Phenoxyacid Herbicide Mix

M-8321-HERB

0.1 mg/mL each in AcCN

1 x 1 mL
14 comps.

Dalapon	Dinoseb
Dicamba	MCPA
2,4-D	MCPP
2,4-D, butoxyethanol ester	Silvex (2,4,5-TP)
2,4-D, ethylhexyl ester	2,4,5-T
2,4-DB	2,4,5-T, butyl ester
Dichlorprop	2,4,5-T, butoxyethanol ester

Organophosphorus Pesticide Mix

M-8321-OP

0.1 mg/mL each in AcCN

1 x 1 mL
15 comps.

Asulam	Methyl parathion
Dichlorvos	Monocrotophos
Dimethoate	Naled
Disulfoton	Phorate
Famphur	Thiofanox
Fensulfothion	Trichlorfon
Merphos	Tris(2,3-Dibromopropyl)phosphate
Methomyl	

Method 8325 Benzidines & Nitrogen containing Pesticides by L-L or L-S Extraction & RP HPLC/Particle Beam/MS

Benzidine/Pesticide Mix

M-553 *

At stated conc. in AcCN:MeOH (50:50)

1 x 1 mL
13 comps.

Benzidine (250 µg/mL)	3,3'-Dimethylbenzidine (350 µg/mL)
Benzoylprop ethyl (350 µg/mL)	Diuron (450 µg/mL)
Caffeine (300 µg/mL)	Linuron (1,300 µg/mL)
Carbaryl (1,000 µg/mL)	Monuron (400 µg/mL)
o-Chlorophenyl thiourea (750 µg/mL)	Rotenone (3,200 µg/mL)
3,3'-Dichlorobenzidine (250 µg/mL)	Siduron (450 µg/mL)
3,3'-Dimethoxybenzidine (750 µg/mL)	

Performance Check Solution

M-553-PC

0.1 mg/mL in AcCN

1 x 1 mL

DFTPPO (Decafluorotriphenylphosphine oxide)

Method 8323 Organometallic Tin Analysis by Electrospray Ion Trap Mass Spectrometry

The following Organo-tin standards were originally formulated to meet custom applications for a number of our customers. AccuStandard has introduced the below set of standards as regular catalog items to meet the increased requests for Organo-tin standards. The environmental interest in these compounds stems from their addition to the list of endocrine disrupters. Organo-tin compounds such as Tributyl-tin were used as marine antifouling agents and Triphenyl-tin as a crop pesticide.

Organometallic Butyltin Chloride Standard

OMT-001

OMT-001-PAK **SAVE**
2000 µg/mL each in CH₂Cl₂

1 x 1 mL
5 x 1 mL
4 comps.

Butyltin trichloride	Tetrabutyltin
Dibutyltin dichloride	Tributyltin chloride

Tri-n-propyltin Surrogate Standard

OMT-003

OMT-003-PAK **SAVE**
2000 µg/mL in CH₂Cl₂

1 x 1 mL
5 x 1 mL

Tri-n-propyltin chloride

Tetra-n-propyl tin Internal Standard

OMT-005

OMT-005-PAK **SAVE**
2000 µg/mL in CH₂Cl₂

1 x 1 mL
5 x 1 mL

Tetra-n-propyl tin

Organometallic Phenyltin Chloride Standard

OMT-002

OMT-002-PAK **SAVE**
2000 µg/mL each in CH₂Cl₂

1 x 1 mL
5 x 1 mL
4 comps.

Diphenyltin dichloride	Tetraphenyltin
Phenyltin trichloride	Triphenyltin chloride

Triphenyltin Chloride Surrogate Standard

OMT-004

OMT-004-PAK **SAVE**
2000 µg/mL in CH₂Cl₂

1 x 1 mL
5 x 1 mL

Triphenyltin chloride

Tetraphenyltin Internal Standard

OMT-006

OMT-006-PAK **SAVE**
2000 µg/mL in CH₂Cl₂

1 x 1 mL
5 x 1 mL

Tetraphenyltin



Thousands of Standards, just a click away
AccuStandard.com

* ColdPAK required to maintain integrity of product.

EPA Method 8000 Series

Explosives



Method 8330 Explosives

TNT Metabolites

Analyte	Concentration (µg/mL)	Solvent	Cat. No.	(1 mL)
2-Amino-4,6-dinitrotoluene	100	AcCN:MeOH (50:50)	M-8330-13-0.1X	
4-Amino-2,6-dinitrotoluene	100	AcCN:MeOH (50:50)	M-8330-14-0.1X	
2,4-Diamino-6-nitrotoluene	100	AcCN	M-8330-ADD-12	
2,6-Diamino-4-nitrotoluene	100	AcCN	M-8330-ADD-13	
1,3-Dinitrobenzene	100	AcCN:MeOH (50:50)	M-8330-01-0.1X	
2,4-Dinitrotoluene	100	AcCN:MeOH (50:50)	M-8330-02-0.1X	
2,6-Dinitrotoluene	100	AcCN:MeOH (50:50)	M-8330-03-0.1X	
3,5-Dinitrotoluene	100	AcCN:MeOH (50:50)	M-8330-ADD-39	
Hexanitrostilbene (HNS)	100	AcCN	M-8330-ADD-26	
2-Hydroxylamino-4,6-dinitrotoluene ★	100	AcCN	M-8330-ADD-18 *	
4-Hydroxylamino-2,6-dinitrotoluene ★	100	AcCN	M-8330-ADD-20 *	
Nitrobenzene	100	AcCN:MeOH (50:50)	M-8330-06-0.1X	
2-Nitrotoluene	100	AcCN:MeOH (50:50)	M-8330-07-0.1X	
3-Nitrotoluene	100	AcCN:MeOH (50:50)	M-8330-08-0.1X	
4-Nitrotoluene	100	AcCN:MeOH (50:50)	M-8330-09-0.1X	
2,2',6,6'-Tetranitro-4,4'-azoxytoluene	100	AcCN:MeOH (50:50)	M-8330-ADD-15	
2,2',6,6'-Tetranitro-4,4'-azotoluene	100	AcCN	M-8330-ADD-17	
4,4',6,6'-Tetranitro-2,2'-azotoluene	100	AcCN	M-8330-ADD-19	
TNT	100	AcCN:MeOH (50:50)	M-8330-11-0.1X	
1,3,5-Trinitrobenzene	100	AcCN:MeOH (50:50)	M-8330-12-0.1X	

Additional Explosives by HPLC

Ammonium picrate	100	AcCN	M-8330-ADD-27
DEGDN	100	AcCN:MeOH (50:50)	M-8330-ADD-36
1,2-Diaminopropane	100	MeOH	M-8330-ADD-9
2,3-Dimethyl-2,3-dinitrobutane (DMNB)	100	AcCN	M-8330-ADD-21
3,5-Dinitroaniline	100	AcCN:MeOH (50:50)	M-8330-ADD-4
1,3-Dinitrobenzene	100	AcCN:MeOH (50:50)	M-8330-01-0.1X
1,2-Dinitroglycerin	100	AcCN:MeOH (50:50)	M-8330-ADD-33
1,3-Dinitroglycerin	100	AcCN:MeOH (50:50)	M-8330-ADD-34
EGDN	100	AcCN	M-8330-ADD-5
Guanidine nitrate	100	MeOH	M-8330-ADD-10
Hexamethylene diperoxide diamine (HMDD)	100	AcCN	M-8330-ADD-45
NEW Hexamethylenetriperoxide diamine (HMTD)	1000	AcCN	M-8330-ADD-45-10X
Hexamethylenetriperoxide diamine (HMTD)	100	AcCN	M-8330-ADD-25
Hexanitrodiphenylamine	100	AcCN:MeOH (50:50)	M-8330-ADD-37
Hexanitrostilbene (HNS)	100	AcCN	M-8330-ADD-26
HMX	100	AcCN:MeOH (50:50)	M-8330-04-0.1X
	1000	AcCN:MeOH (50:50)	M-8330-04
Hydrazine	100	MeOH	M-8330-ADD-8
N-Nitrodimethylamine	100	AcCN	M-8330-ADD-40
Nitroglycerin	100	EtOH	M-8330-ADD-1
	1000	EtOH	M-8330-ADD-1-10X
1-Nitroglycerin	100	AcCN:MeOH (50:50)	M-8330-ADD-31
2-Nitroglycerin	100	AcCN:MeOH (50:50)	M-8330-ADD-32
Nitroguanidine	100	MeOH	M-8330-ADD-6
Nitromethane	100	MeOH	M-8330-ADD-7
PETN	100	MeOH	M-8330-ADD-2
	1000	MeOH	M-8330-ADD-2-10X
Picramic acid	100	AcCN:MeOH (50:50)	M-8330-ADD-22
Picric acid	100	AcCN:MeOH (50:50)	M-8330-ADD-3
PYX(2,6-bis,bis-(picrylamine)-3,5-dinitropyridine	100	AcCN	M-8330-ADD-11
RDX	100	AcCN:MeOH (50:50)	M-8330-05-0.1X
TEGDN	100	AcCN:MeOH (50:50)	M-8330-ADD-41-R1
Tetryl	100	AcCN:MeOH (50:50)	M-8330-10-0.1X
1,3,5-Triamino-2,4,6-trinitrobenzene (TATB)	40	Dimethyl formamide	M-8330-ADD-14-DMF
Triacetone triperoxide (TATP)	100	AcCN	M-8330-ADD-24 *
2,4,6-Triaminotoluene trihydrochloride	N/A	5 mg	M-8330-ADD-23N-5MG
Trimethylolethane trinitrate	100	AcCN:MeOH (50:50)	M-8330-ADD-28
2,4,6-Trinitroresorcinol	100	AcCN:MeOH (50:50)	M-8330-ADD-29

★ 3 month stability

* ColdPAK required to maintain integrity of product.

Explosives by HPLC Set

M-8330-R-SET * 14 x 1 mL

Each at 100 µg/mL in AcCN:MeOH (50:50)

M-8330-R-10X-SET * 14 x 1 mL

Each at 1000 µg/mL in AcCN:MeOH (50:50)

- 1,3-Dinitrobenzene (01)
- 2,4-Dinitrotoluene (02)
- 2,6-Dinitrotoluene (03)
- HMX (04)
- RDX (05)
- Nitrobenzene (06)
- 2-Nitrotoluene (07)
- 3-Nitrotoluene (08)
- 4-Nitrotoluene (09)
- Tetryl (10)
- TNT (11)
- 1,3,5-Trinitrobenzene (12)
- 2-Amino-4,6-dinitrotoluene (13)
- 4-Amino-2,6-dinitrotoluene (14)

Technical Note

DMNB (M-8330-ADD-21) is a required taggant added to commercially manufactured plastic explosives.

Additional Explosive Methods

**Method 529 Explosive & Related Compounds by
SPE & Capillary Column GC/MS**

Method 8095 Explosive Intermediate by GC/ECD



EPA Method 8000 Series

Method 8330 Multi-Component Formulations for Explosive Analysis

The following A and B mixes provide better resolution between possible coeluting analytes, assisting the chemist to optimize the HPLC system. We suggest, when first performing Method 8330 development, to purchase the high concentration 14 x 1 mL set "M-8330-R-10X-SET":

M-8330A * 1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)
M-8330A-10X * 1 x 1 mL
1.0 mg/mL each in AcCN:MeOH (50:50)
7 comps.

1,3-Dinitrobenzene	RDX
2,4-Dinitrotoluene	1,3,5-Trinitrobenzene
HMX	TNT
Nitrobenzene	

M-8330A-R * 1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)
M-8330A-R-10X * 1 x 1 mL
1.0 mg/mL each in AcCN:MeOH (50:50)
8 comps.

2-Amino-4,6-dinitrotoluene	Nitrobenzene
1,3-Dinitrobenzene	RDX
2,4-Dinitrotoluene	1,3,5-Trinitrobenzene
HMX	TNT

Composite Explosive Mixture

M-8330-R-0.1X 1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)
M-8330-R-0.5X 1 x 1 mL
0.5 mg/mL each in AcCN:MeOH (50:50)

1,3-Dinitrobenzene	3-Nitrotoluene
2,4-Dinitrotoluene	4-Nitrotoluene
2,6-Dinitrotoluene	Tetryl
HMX	TNT
RDX	1,3,5-Trinitrobenzene
Nitrobenzene	2-Amino-4,6-dinitrotoluene
2-Nitrotoluene	4-Amino-2,6-dinitrotoluene

Internal Standard

M-8330-IS 1 x 1 mL
M-8330-IS-PAK **SAVE** 5 x 1 mL
1.0 mg/mL in MeOH
3,4-Dinitrotoluene

Method 8410 Semi-Volatiles by GC/FTIR

Internal Standard

M-8410-IS 1 x 1 mL
M-8410-IS-PAK **SAVE** 5 x 1 mL
2.0 mg/mL each in CH₂Cl₂
1-Fluoronaphthalene *p*-Terphenyl-d₁₀

Method 8430 bis(2-Chloroethyl)ether & Hydrolysis Products

M-8430 1 x 1 mL
1.0 mg/mL each in Water
5 comps.
bis(2-Chloroethyl) ether Diethylene glycol
2-Chloroethanol Ethylene glycol
2-(2-Chloroethoxy)-ethanol

M-8330B * 1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)
M-8330B-10X * 1 x 1 mL
1.0 mg/mL each in AcCN:MeOH (50:50)
5 comps.

Tetryl	3-Nitrotoluene
2,6-Dinitrotoluene	4-Nitrotoluene
2-Nitrotoluene	

M-8330B-R * 1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)
M-8330B-R-10X * 1 x 1 mL
1.0 mg/mL each in AcCN:MeOH (50:50)
7 comps.

2-Amino-4,6-dinitrotoluene	2-Nitrotoluene
4-Amino-2,6-dinitrotoluene	3-Nitrotoluene
Tetryl	4-Nitrotoluene
2,6-Dinitrotoluene	

M-8330B-R2 * 1 x 1 mL
0.1 mg/mL each in AcCN:MeOH (50:50)
M-8330B-R2-10X * 1 x 1 mL
1.0 mg/mL each in AcCN:MeOH (50:50)
6 comps.

4-Amino-2,6-dinitrotoluene	2-Nitrotoluene
Tetryl	3-Nitrotoluene
2,6-Dinitrotoluene	4-Nitrotoluene

Surrogate Standard

M-8330-SS 1 x 1 mL
1.0 mg/mL in MeOH
1,2-Dinitrobenzene

Method 8440 Total Petroleum Hydrocarbon

Total Recoverable Petroleum Hydrocarbon Mix

M-8440 1 x 1 mL
M-8440-PAK **SAVE** 5 x 1 mL
At stated conc. in Tetrachloroethene
3 comps.
Chlorobenzene (0.10 w/w %) Isooctane (0.15 w/w %)
n-Hexadecane (0.15 w/w %)

Silica Gel Cleanup Calibration Solution

M-8440-SGC 1 x 1 mL
M-8440-SGC-PAK **SAVE** 5 x 1 mL
10.0 mg/mL in Tetrachloroethene
Corn Oil

Total Petroleum Hydrocarbon Concentrate Mix

M-8440-CON 1 x 1 mL
M-8440-CON-PAK **SAVE** 5 x 1 mL
3 comps.
Chlorobenzene (25.0 vol %) Isooctane (37.5 vol %)
n-Hexadecane (37.5 vol %)

* ColdPAK required to maintain integrity of product.



REACH Statement

In an effort to ensure that all chemicals are tested and used in safe ways, the European Union has adopted the REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) directive, which went into effect on June 1, 2007. This plan originated out of the desire to replace the patchwork of existing regulations in Europe with a more comprehensive law that encompasses all chemicals, including those placed on the market prior to 1981 when the industry did not have to provide documented health and safety information.

Listed below are the current dates outlined in the REACH directive.

June 1, 2013 PHASE 2 - Deadline for registration of substances supplied at ≥ 100 tons per year

June 1, 2018 PHASE 3 - Deadline for registration of substances supplied at ≥ 1 ton per year

AccuStandard fully supports the efforts and objectives of the REACH Directive and will continue to monitor any changes in the scope of this regulation. Changes may include newly banned substances, expiring exemptions or lowered maximum concentration levels. As a leading manufacturer of chemical reference standards in the world, AccuStandard will take all necessary actions under REACH in order to continue to expand the supply of our products in Europe. For other guidance on REACH, please go to the ECHA-website (www.echa.europa.eu).

Standards for International Testing Protocols

AccuStandard has researched and developed standard solutions that meet the requirements of various governmental bodies around the world. If you do not locate a solution that meets your requirements, please contact our Technical Department, and we will quickly develop a formulation that meets your requirements.

Organic Chemicals	USEPA Methods	DIN	ISO
PCBs	508, 617, 680, 1668, 8082		
Congeners	508, 525.1, 525.2, 1668, 8082	38407-3, 38414-20	6468
PCB Metabolites and Derivatives	8082		
Aroclors	505, 508, 508A, 625		
Dibenzofurans	613, 8280A		
PAHs and Derivatives	525, 550, 553, 610, 625, 8100, 8310, 1653	38407-8, 38407-18, 38414-23	
Nitroaromatics	609, 8070A, 8090, 8091	38407-17	
Amines, Anilines and Amino Aromatics	605, 607, 620, 8131, 8325	38407-16	
Nitrogen Containing Compounds (other)	509, 553		
Phenols and Derivatives	528, 604, 642, 8040, 8040, 8041, 8085	12673	17495
Phthalates	506, 606, 8060, 8061A		
Aldehydes	554, 556, 1667A, 8315, 8315A		
Ketones	554, 556, 8315, 8315A, 8091		
Halo Ethers	611, 8110, 8111		
Haloacetic acids	552		
Pesticides and Herbicides	501, 505, 507, 508, 515, 525, 531, 547, 548, 549, 552, 551, 555, 608, 614, 615, 619, 608.1, 625, 627, 629, 631, 632, 633, 634, 635, 636, 639, 640, 641, 643, 644, 645, 680, 1618, 1656, 1657, 1658, 1659, 8080, 8081, 8085, 8140, 8141, 8318, 8150, 8151	38407-2, 38407-11, 38407-14, 38407-22	6468, 10695
Volatiles	502, 503, 504, 524, 551B, 556, 601, 602, 603, 624, 1666, 8010, 8011, 8015B, 8020, 8021, 8030, 8031, 8032, 8033,	38407-2, 38407-9	10301
Explosives	8095, 8330	38407-17, 38407-21	

Canada	242-244
PCB Congener Standards	242
Dioxin Calibration & Window Defining Stds	242
PAH & Brownfield Regulation Mixtures	243
MISA Standards	244
Europe	245-253
Allergens (see Application section)	98-103
Dyes & Aryl Amines (see Dye section)	104-106
PCB Congeners	245
Volatiles	246
Chlorinated Organic Volatiles	246
Nitroaromatic Compounds	246
Explosives	246
PAHs	247
PBDEs	247
Aliphatic, Aromatic Amines and Derivatives	248
Halo Acetic Acids	248
European Food Safety Authority (EFSA) ITX	248
Pesticides	249-252
Phenols and Derivatives	252
Hydrocarbon Oil Index	253
Automotive Engine Exhaust	253
Carbonyl Compounds by HPLC	253
Japan	254
Ministry of Health & Welfare Standards	254
Environmental Agency Methods	254
Korea	254
Drinking Water Standards	254
USA	255-256
California	255
Florida	255
Minnesota	256
Wisconsin	256
State Specific LUFT/LUST (UST)	311-324
Methods other than EPA	257-260
Biocides NEW	257-260
Halobenzoquinones NEW	261
ASTM 7065, ASTM 7485, USP 467, F-List	261-262



Regional Standards

Canadian Methodologies

PCB Congeners

Toxicity and Abundance based PCB Congener Formulations

These formulations have been selected by the Institute for Biological Sciences of Canada. The concentration level for these formulations is selected so that 1 mL of standard diluted into 100 mL will show equal response by ECD.

PCB Congener Set

C-CAN-SET

4 x 1 mL (C-CAN-01, C-CAN-02, C-CAN-03, C-CAN-04)

PCB Congener Mix #1

C-CAN-01	1 x 1 mL
<i>At stated conc. in Isooctane</i>	14 comps.
(Congener No.)	µg/mL
2,2',5-Trichlorobiphenyl (18)	11.8
2,4',5-Trichlorobiphenyl (31)	6.6
2,2',3,3'-Tetrachlorobiphenyl (40)	4.9
2,2',3,5'-Tetrachlorobiphenyl (44)	5.9
2,2',4,5'-Tetrachlorobiphenyl (49)	7.6
2,2',6,6'-Tetrachlorobiphenyl (54)	16.6
3,3',4,4'-Tetrachlorobiphenyl (77)	5.5
2,2',3,4,5-Pentachlorobiphenyl (86)	2.9
2,2',3,4,5'-Pentachlorobiphenyl (87)	3.8
2,3',4,5',6-Pentachlorobiphenyl (121)	3.1
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	2.1
2,3,3',4,4',5-Hexachlorobiphenyl (156)	1.5
2,3,3',4,5,5'-Hexachlorobiphenyl (159)	1.2
Decachlorobiphenyl (209)	1.7

PCB Congener Mix #3

C-CAN-03	1 x 1 mL
<i>At stated conc. in Isooctane</i>	15 comps.
(Congener No.)	µg/mL
4,4'-Dichlorobiphenyl (15)	138.1
2,3,4,4',5-Pentachlorobiphenyl (114)	6.3
2,2',3,3',4,5-Hexachlorobiphenyl (129)	8.3
2,2',3,4,4',5-Hexachlorobiphenyl (137)	7.4
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	7.3
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	5.2
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	6.6
2,2',3,4,5,5',6-Heptachlorobiphenyl (185)	3.5
2,3,3',4,4',5,5'-Heptachlorobiphenyl (189)	4.7
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	5
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (201)	4.8
2,2',3,3',4,4',5,5',6-Octachlorobiphenyl (199)	7
2,2',3,4,4',5,5',6-Octachlorobiphenyl (203)	5.1
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	6.7
Decachlorobiphenyl (209)	5.1

PCB Congener Mix #2

C-CAN-02	1 x 1 mL
<i>At stated conc. in Isooctane</i>	15 comps.
(Congener No.)	µg/mL
4,4'-Dichlorobiphenyl (15)	91.9
2,2',5,5'-Tetrachlorobiphenyl (52)	15.2
2,3,4,4'-Tetrachlorobiphenyl (60)	3.9
2,2',4,5',6-Pentachlorobiphenyl (103)	10.8
2,3,3',4,4'-Pentachlorobiphenyl (105)	4
2,2',3,3',4,5,6-Heptachlorobiphenyl (128)	4.9
2,2',3,4,5,6'-Hexachlorobiphenyl (143)	5.7
2,2',4,4',5,6'-Hexachlorobiphenyl (154)	6.2
2,2',3,3',4,5,6-Heptachlorobiphenyl (173)	2.3
2,2',3,4,4',5,6'-Heptachlorobiphenyl (182)	3.8
2,2',3,3',5,5',6,6'-Octachlorobiphenyl (202)	3.6
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	3.2
2,2',3,3',4,4',5,6,6'-Nonachlorobiphenyl (207)	3.8
2,2',3,3',4,4',5,5',6,6'-Nonachlorobiphenyl (208)	2.4
Decachlorobiphenyl (209)	2.8

PCB Congener Mix #4

C-CAN-04	1 x 1 mL
<i>At stated conc. in Isooctane</i>	15 comps.
(Congener No.)	µg/mL
4,4'-Dichlorobiphenyl (14)	76.7
2,2',4,5,5'-Pentachlorobiphenyl (101)	8.9
2,3',4,4',5-Pentachlorobiphenyl (118)	3.9
2,2',3,4,4',5'-Hexachlorobiphenyl (138)	4.2
2,2',3,4,5,5'-Hexachlorobiphenyl (141)	2.8
2,2',3,4,5,6'-Hexachlorobiphenyl (151)	5
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	3.3
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	3
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	2.8
2,2',3,4',5,5',6-Heptachlorobiphenyl (187)	3.2
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	2.4
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	2.6
2,2',3,3',4,4',5,6'-Octachlorobiphenyl (196)	3.3
2,2',3,3',4,5,5',6-Octachlorobiphenyl (199)	3.6
Decachlorobiphenyl (209)	2.7

PCB Congener Formulation Quebec Ministry of Environment

PCB Congener Mix

C-QME-01	1 x 1 mL
<i>At stated conc. in Isooctane</i>	41 comps.
(Congener No.)	ng/mL
2,2',4-Trichlorobiphenyl (17)	500
2,2',5-Trichlorobiphenyl (18)	2000
2,4,4'-Trichlorobiphenyl (28)	2000
2,4',5-Trichlorobiphenyl (31)	1500
2',3,4-Trichlorobiphenyl (33)	2000
2,2',3,5'-Tetrachlorobiphenyl (44)	2000
2,2',4,5'-Tetrachlorobiphenyl (49)	2000
2,2',5,5'-Tetrachlorobiphenyl (52)	2000
2,3',4',5-Tetrachlorobiphenyl (70)	2000
2,4,4',5-Tetrachlorobiphenyl (74)	2000
2,2',3,3',4-Pentachlorobiphenyl (82)	500
2,2',3,4,4',5-Pentachlorobiphenyl (87)	2000
2,2',3,5',6-Pentachlorobiphenyl (95)	1000
2,2',4,4',5-Pentachlorobiphenyl (99)	2000
2,2',4,5,5'-Pentachlorobiphenyl (101)	2000
2,3,3',4,4'-Pentachlorobiphenyl (105)	500
2,3,3',4,4',6-Pentachlorobiphenyl (110)	2000
2,3',4,4',5-Pentachlorobiphenyl (118)	2000
2,2',3,3',4,4'-Hexachlorobiphenyl (128)	2000
2,2',3,3',4,6'-Hexachlorobiphenyl (132)	1000
2,2',3,4,4',5'-Hexachlorobiphenyl (138)	2000
2,2',3,4',5',6-Hexachlorobiphenyl (149)	2000
2,2',3,5,5',6-Hexachlorobiphenyl (151)	2000
2,2',4,4',5,5'-Hexachlorobiphenyl (153)	2000
2,3,3',4,4',5-Hexachlorobiphenyl (156)	2000
2,3,3',4,4',6-Hexachlorobiphenyl (158)	500
3,3',4,4',5,5'-Hexachlorobiphenyl (169)	2000
2,2',3,3',4,4',5-Heptachlorobiphenyl (170)	2000
2,2',3,3',4,4',6-Heptachlorobiphenyl (171)	2000
2,2',3,3',4,4',5,6-Heptachlorobiphenyl (177)	2000
2,2',3,4,4',5,5'-Heptachlorobiphenyl (180)	2000
2,2',3,4,4',5',6-Heptachlorobiphenyl (183)	2000
2,2',3,4',5,5',6-Heptachlorobiphenyl (187)	2000
2,3,3',4,4',5',6-Heptachlorobiphenyl (191)	2000
2,2',3,3',4,4',5,5'-Octachlorobiphenyl (194)	2000
2,2',3,3',4,4',5,6-Octachlorobiphenyl (195)	2000
2,2',3,3',4,4',5,5',6-Octachlorobiphenyl (199)	1500
2,3,3',4,4',5,5',6-Octachlorobiphenyl (205)	2000
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (206)	2000
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl (208)	2000
Decachlorobiphenyl (209)	2000

Dioxins: Calibration & Window Defining Mixtures (Canadian Environmental Methods)

Custom Window Defining Mixture

D-WD

20,000 ng/mL in Toluene

D-WD-2.5X

50,000 ng/mL in Toluene

1 x 1 mL

1 x 1 mL

7 comps.

- 1,2,4,6,8/1,2,4,7,9-Pentachlorodibenzo-*p*-dioxin (Isomer pair)
- 1,2,3,8,9-Pentachlorodibenzo-*p*-dioxin
- 1,2,4,6,7,9/1,2,4,6,8,9-Hexachlorodibenzo-*p*-dioxin (Isomer pair)
- 1,2,3,4,6,7-Hexachlorodibenzo-*p*-dioxin
- 1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin
- 1,2,3,4,6,7,9-Heptachlorodibenzo-*p*-dioxin
- Octachlorodibenzo-*p*-dioxin

Custom Calibration Mixture

D-CAL

20,000 ng/mL in Toluene

D-CAL-2.5X

50,000 ng/mL in Toluene

1 x 1 mL

1 x 1 mL

6 comps.

- 1,2,3,7,8-Pentachlorodibenzo-*p*-dioxin
- 1,2,3,4,7,8-Hexachlorodibenzo-*p*-dioxin
- 1,2,3,6,7,8-Hexachlorodibenzo-*p*-dioxin
- 1,2,3,7,8,9-Hexachlorodibenzo-*p*-dioxin
- 1,2,3,4,6,7,8-Heptachlorodibenzo-*p*-dioxin
- Octachlorodibenzo-*p*-dioxin



PAH Mixture Quebec Ministry of Environment

PAH Standard

H-QME-01

500 µg/mL each in CH₂Cl₂:Benzene (50:50)

1 x 1 mL

24 comps

Acenaphthene	Dibenz[a,h]anthracene
Acenaphthylene	Dibenzo[a,h]pyrene
Anthracene	Dibenzo[a,i]pyrene
Benz[a]anthracene	Dibenzo[a,l]pyrene
Benzo[b]fluoranthene	7,12-Dimethylbenz[a]anthracene
Benzo[j]fluoranthene	Fluoranthene
Benzo[k]fluoranthene	Fluorene
Benzo[g,h,i]perylene	Indeno[1,2,3-cd]pyrene
Benzo[c]phenanthrene	3-Methylcholanthrene
Benzo[a]pyrene	Naphthalene
Benzo[e]pyrene	Phenanthrene
Chrysene	Pyrene



Petroleum Brownfield Regulation

The Brownfield Regulation has been approved by the Canadian Ministry of the Environment as of October 1, 2004.

Light Petroleum Fraction

CCME-LPF-SET

At stated conc. (µg/mL) in MeOH

5 x 1 mL

8 comps.

Compound	0.05X	0.1X	0.2X	0.5X	1X
n-Decane	12.5	25	50	125	250
n-Hexane	12.5	25	50	125	250
Toluene	12.5	25	50	125	250
Benzene	12.5	25	50	125	250
o-Xylene	12.5	25	50	125	250
m-Xylene	6.25	12.5	25	62.5	125
p-Xylene	6.25	12.5	25	62.5	125
Ethylbenzene	12.5	25	50	125	250

Medium & Heavy Petroleum Fraction

CCME-MHPF-SET

At stated conc. (µg/mL) in n-Hexane

3 x 1 mL

3 comps.

Compound	0.1X	0.5X	1X
n-Decane	40	200	400
n-Hexadecane	40	200	400
n-Tetraatriacontane	40	200	400

Performance Check Standard

CCME-QC

1 x 1 mL

CCME-QC-PAK

5 x 1 mL

40 µg/mL each in n-Hexane:Cyclohexane (50:50)

2 comps.

n-Pentacontane
n-Tetracontane

Spike Standard

CCME-SPIKE

2500 µg/mL each in n-Hexane

1 x 1 mL

2 comps.

SAE 30W Motor Oil - Non-Detergent Formula
#2 Diesel Fuel - 50% Weathered

Canadian Atlantic RBCA EPH Mix

CCME-EPH

1 x 1 mL

1000 µg/mL each in Hexane:CH₂Cl₂ (85:15)

11 comps.

Acenaphthene
Anthracene
Benzo[a]pyrene
Chrysene
n-Decan
n-Dodecane
n-Dotriacontane
n-Heneicosane
n-Hexadecane
n-Octacosane
Naphthalene

Canadian Atlantic RBCA VPH Mix

CCME-VPH

1 x 1 mL

1000 µg/mL each in MeOH

12 comps.

Benzene
n-Decane
Ethylbenzene
n-Heptane
n-Hexane
1-Methyl-3-ethylbenzene
n-Octane
Toluene
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
o-Xylene
p-Xylene

Surrogate Standard

CCME-EPH/SS

1 x 1 mL

1000 µg/mL each in CH₂Cl₂

2 comps.

n-Dotriacontane
Isobutylbenzene

Surrogate Standard

CCME-VPH/SS

1 x 1 mL

1000 µg/mL in MeOH

Isobutylbenzene

Canadian Drinking Water Brownfield Regulation

Phenoxyacid Herbicides Mix

CCME-CDW-PHERB

1 x 1 mL

1000 µg/mL each in Acetone

11 comps.

Bromoxynil
2,4-D
Dicamba
2,4-Dichlorophenol
Diclofop methyl
Dinoseb
Pentachlorophenol
Picloram
2,4,5-T
2,3,4,6-Tetrachlorophenol
2,4,6-Trichlorophenol

Carbamates Mix

CCME-CDW-CARB

1 x 1 mL

100 µg/mL each in AcCN

5 comps.

Aldicarb
Bendiocarb
Carbaryl
Carbofuran
Triallate

Chlorinated Pesticide Mix

CCME-CDW-CPEST

1 x 1 mL

200 µg/mL each in Hexane:Toluene (50:50)

14 comps.

Aldrin
γ-BHC
α-Chlordane
γ-Chlordane
2,4'-DDE
4,4'-DDE
2,4'-DDT
4,4'-DDT
Dieldrin
Heptachlor
Heptachlor epoxide (Isomer B)
Methoxychlor
Oxychlordane Isomer
Trifluralin



Regional Standards

Municipal & Industrial Strategy for Abatement (MISA) - Canadian

MISA Analytical Test Groups

Set MISA-VH-1/VH-2-SET 2 x 1 mL (MISA-VH-1, MISA-VH-2)

Group 16: Volatiles, Halogenated

MISA-VH-1	1 x 1 mL	
MISA-VH-1-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in MeOH		22 comps.
Bromoform	trans-1,2-Dichloroethene	
Carbon tetrachloride	1,1-Dichloroethene	
Chlorobenzene	1,2-Dichloropropane	
Chloroform	cis-1,3-Dichloropropene*	
Dibromochloromethane	trans-1,3-Dichloropropene**	
1,2-Dibromoethane	Methylene chloride	
1,2-Dichlorobenzene	1,1,2,2-Tetrachloroethane	
1,3-Dichlorobenzene	Tetrachloroethene	
1,4-Dichlorobenzene	1,1,1-Trichloroethane	
1,2-Dichloroethane	1,1,2-Trichloroethane	* cis (1.06 x conc.)
1,1-Dichloroethane	Trichloroethene	** trans (0.94 x conc.)

MISA-VH-2 1 x 1 mL
MISA-VH-2-PAK **SAVE** 5 x 1 mL
 0.5 mg/mL each in MeOH 5 comps.

Bromomethane	Trichlorofluoromethane
Chloroethane	Vinyl chloride
Chloromethane	

Group 17: Volatiles, Non-Halogenated

MISA-VNH	1 x 1 mL	
MISA-VNH-PAK	SAVE	5 x 1 mL
0.5 mg/mL each in MeOH		7 comps.
Benzene	o-Xylene	
Ethylbenzene	m-Xylene	
Styrene	p-Xylene	
Toluene		

Group 18: Volatiles, Water Soluble

MISA-VWS	1 x 1 mL
2.0 mg/mL each in Water	2 comps.
Acrolein	Acrylonitrile

Group 19: Extractables, Base-Neutral

Z-014G 1 x 1 mL
Z-014G-PAK **SAVE** 5 x 1 mL
 2.0 mg/mL each in CH₂Cl₂: Benzene (50:50) 16 comps.

Acenaphthene	Chrysene
Acenaphthylene	Dibenz[a,h]anthracene
Anthracene	Fluoranthene
Benz[a]anthracene	Fluorene
Benzo[a]pyrene	Indeno[1,2,3-cd]pyrene
Benzo[b]fluoranthene	Naphthalene
Benzo[ghi]perylene	Phenanthrene
Benzo[k]fluoranthene	Pyrene

MISA-BN-1 1 x 1 mL
 2.0 mg/mL each in CH₂Cl₂ 8 comps.

Biphenyl	1-Methylnaphthalene
Camphene	2-Methylnaphthalene
1-Chloronaphthalene	5-Nitroacenaphthene
2-Chloronaphthalene	Perylene

MISA-BN-2 1 x 1 mL
 2.0 mg/mL each in CH₂Cl₂ 8 comps.

Benzylbutylphthalate	4-Chlorophenyl phenyl ether
4-Bromophenyl phenyl ether	Di-n-butyl phthalate
bis(2-Chloroethyl) ether	Di-n-octyl phthalate
bis(2-Chloroisopropyl) ether	bis(2-Ethylhexyl)phthalate

MISA-BN-3 1 x 1 mL
 2.0 mg/mL each in CH₂Cl₂ 8 comps.

bis(2-Chloroethoxy)methane	Diphenylether
2,4-Dinitrotoluene	Indole
2,6-Dinitrotoluene	N-Nitroso-diphenylamine
Diphenylamine	N-Nitroso-di-n-propyl amine

Group 20: Extractables, Acid (Phenolics)

MISA-A	1 x 1 mL
MISA-A-PAK	SAVE 5 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	20 comps.
4-Chloro-3-methylphenol	4-Nitrophenol
2-Chlorophenol	Pentachlorophenol
2-Cresol	Phenol
3-Cresol	2,3,4,5-Tetrachlorophenol
4-Cresol	2,3,4,6-Tetrachlorophenol
2,4-Dichlorophenol	2,3,5,6-Tetrachlorophenol
2,6-Dichlorophenol	2,3,4-Trichlorophenol
2,4-Dimethylphenol	2,3,5-Trichlorophenol
4,6-Dinitro-2-cresol	2,4,5-Trichlorophenol
2,4-Dinitrophenol	2,4,6-Trichlorophenol

Group 22: Organochlorine Pesticides

MISA-PEST	1 x 1 mL
MISA-PEST-PAK	SAVE 5 x 1 mL
2.0 mg/mL each in Acetone	18 comps.
Aldrin	Endosulfan I
α-BHC	Endosulfan II
β-BHC	Endosulfan sulfate
γ-BHC	Endrin
δ-BHC	Endrin aldehyde
4,4'-DDD	Endrin ketone
4,4'-DDE	Heptachlor
4,4'-DDT	Heptachlor epoxide isomer B
Dieldrin	Methoxychlor

Group 23: Extractables, Chlorinated Neutrals

MISA-NC	1 x 1 mL
2.0 mg/mL each in CH ₂ Cl ₂	12 comps.
Hexachlorobenzene	1,2,3,4-Tetrachlorobenzene
Hexachlorobutadiene	1,2,3,5-Tetrachlorobenzene
Hexachlorocyclopentadiene	1,2,4,5-Tetrachlorobenzene
Hexachloroethane	1,2,3-Trichlorobenzene
Octachlorostyrene	1,2,4-Trichlorobenzene
Pentachlorobenzene	2,4,5-Trichlorotoluene

Group 27: Polychlorinated Biphenyls Solutions and Sets

Each at 35 µg/mL	Isooctane	MeOH	1 mL
Aroclor 1016	C-216S	C-216S-M	
Aroclor 1221	C-221S	C-221S-M	
Aroclor 1232	C-232S	C-232S-M	
Aroclor 1242	C-242S	C-242S-M	
Aroclor 1248	C-248S	C-248S-M	
Aroclor 1254	C-254S	C-254S-M	
Aroclor 1260	C-260S	C-260S-M	
Aroclor 1262	C-262S	C-262S-M	
Aroclor 1268	C-268S	C-268S-M	
Set of 9 above	Z-008S-SET	Z-008S-M-SET	

PCB Congener Standards

PCB Congener Mixture

PCB-W22 1 x 1 mL
10 µg/mL each in Isooctane 15 comps.
PCB-W22-PAK **SAVE** 5 x 1 mL

PCB-W22-SET 15 x 1 mL
100 µg/mL in Isooctane (Set of Individual Solutions)

No.
18 2,2',5-Trichlorobiphenyl
20 2,3,3'-Trichlorobiphenyl
28 2,4,4'-Trichlorobiphenyl
31 2,4',5-Trichlorobiphenyl
44 2,2',3,5'-Tetrachlorobiphenyl
52 2,2',5,5'-Tetrachlorobiphenyl
101 2,2',4,5,5'-Pentachlorobiphenyl
105 2,3,3',4,4'-Pentachlorobiphenyl
118 2,3',4,4',5-Pentachlorobiphenyl
138 2,2',3,4,4',5'-Hexachlorobiphenyl
149 2,2',3,4',5',6'-Hexachlorobiphenyl
153 2,2',4,4',5,5'-Hexachlorobiphenyl
170 2,2',3,3',4,4',5-Heptachlorobiphenyl
180 2,2',3,4,4',5,5'-Heptachlorobiphenyl
194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl

Internal Standard

C-EU-IS-10ML 1 x 10 mL
At stated conc. in Isooctane 2 comps.

2,4,6-Trichlorobiphenyl
2,2',3,3',4,4',5,5',6'-Decachlorobiphenyl

ISO 6468 PCB Standard

ISO6468-PCB 1 x 1 mL
10 µg/mL each in Hexane 7 comps.

2,4,4'-Trichlorobiphenyl
2,2',5,5'-Tetrachlorobiphenyl
2,2',4,5,5'-Pentachlorobiphenyl
2,2',3,4,4',5'-Hexachlorobiphenyl
2,2',4,4',5,5'-Hexachlorobiphenyl
2,2',3,4,4',5,5'-Heptachlorobiphenyl
2,2',3,3',4,4',5,5'-Octachlorobiphenyl

PCB Congener Content Evaluation Mix #1

AE-00059 1 x 1 mL
AE-00059-10ML 1 x 10 mL
10 µg/mL each in Isooctane 6 comps.

No.
28 2,4,4'-Trichlorobiphenyl
52 2,2',5,5'-Tetrachlorobiphenyl
101 2,2',4,5,5'-Pentachlorobiphenyl
138 2,2',3,4,4',5'-Hexachlorobiphenyl
153 2,2',4,4',5,5'-Hexachlorobiphenyl
180 2,2',3,4,4',5,5'-Heptachlorobiphenyl

PCB Congener Content Evaluation Mix #2

AE-00060 1 x 1 mL
AE-00060-10ML 1 x 10 mL
10 µg/mL each in Isooctane 3 comps.

No.
77 3,3',4,4'-Tetrachlorobiphenyl
126 3,3',4,4',5-Pentachlorobiphenyl
169 3,3',4,4',5,5'-Hexachlorobiphenyl

Congener Calibration Mix #27

AE-00081-10ML 1 x 1 mL
100 µg/mL each in Isooctane 10 comps.

2,4,4'-Trichlorobiphenyl
2,2',5,5'-Tetrachlorobiphenyl
2,2',4,5,5'-Pentachlorobiphenyl
2,3,3',4,4'-Pentachlorobiphenyl
2,3',4,4',5-Pentachlorobiphenyl
2,2',3,4,4',5'-Hexachlorobiphenyl
2,2',4,4',5,5'-Hexachlorobiphenyl
2,3,3',4,4',5-Hexachlorobiphenyl
2,2',3,4,4',5,5'-Heptachlorobiphenyl
Decachlorobiphenyl

Congener Calibration Mix

AE-00061 1 x 1 mL
AE-00061-10ML 1 x 10 mL
10 µg/mL each in Isooctane 14 comps.

No.
18 2,2',5-Trichlorobiphenyl
28 2,4,4'-Trichlorobiphenyl
31 2,4',5-Trichlorobiphenyl
44 2,2',3,5'-Tetrachlorobiphenyl
52 2,2',5,5'-Tetrachlorobiphenyl
101 2,2',4,5,5'-Pentachlorobiphenyl
118 2,3',4,4',5-Pentachlorobiphenyl
138 2,2',3,4,4',5'-Hexachlorobiphenyl
149 2,2',3,4',5',6'-Hexachlorobiphenyl
153 2,2',4,4',5,5'-Hexachlorobiphenyl
170 2,2',3,3',4,4',5-Heptachlorobiphenyl
180 2,2',3,4,4',5,5'-Heptachlorobiphenyl
194 2,2',3,3',4,4',5,5'-Octachlorobiphenyl
209 Decachlorobiphenyl

Internal Standards

Each in 100 µg/mL in Isooctane

C-030S-TP 1 x 1 mL
2,4,6-Trichlorobiphenyl

C-209S-TP 1 x 1 mL
2,2',3,3',4,4',5,5',6'-Decachlorobiphenyl

Technical Note

These Congener Content Evaluation Mixes have proven useful for European Laboratories estimating the PCB content of a sample when following EU guideline 96/59/EU for cleanup of PCBs.



Thousands of Standards, just a click away

AccuStandard.com

Volatiles

DIN 38407-2 Benzene Standard

Determination of water, waste water and sludge for low volatile halogenated hydrocarbons by GC.

DIN38407-2-BENZ 1 x 1 mL
10 µg/mL each in *n*-Hexane 5 comps.

Hexachlorobenzene
Pentachlorobenzene
Pentachloronitrobenzene
1,2,4,5-Tetrachlorobenzene
1,2,4-Trichlorobenzene

Volatile Standard

AE-00048 1 x 1 mL
100 µg/mL each in MeOH 5 comps.

1,1,1-Trichloroethane Dichloromethane
Trichloroethene Tetrachloromethane
Tetrachloroethene

Calibration Solution

Set of 5 ampules with a conc. each in MeOH of
1 µg/mL, 5 µg/mL, 10 µg/mL, 50 µg/mL and 100 µg/mL

Compound	Cat. No.	Unit
1,1,1-Trichloroethane	AE-00034-CAL-SET	5 x 1 mL
Trichloroethene	AE-00035-CAL-SET	5 x 1 mL
Tetrachloroethene	AE-00036-CAL-SET	5 x 1 mL
Dichloromethane	AE-00037-CAL-SET	5 x 1 mL
Carbon tetrachloride	AE-00038-CAL-SET	5 x 1 mL

DIN 38407-9 Benzene Mix

Determination of Benzene and Benzene derivatives in water, wastewater and sludge by GC.

DIN38407-9-BENZ 1 x 1 mL
100 µg/mL each in MeOH 8 comps.

Benzene 1,4-Dichlorobenzene
Toluene *o*-Xylene
Ethylbenzene *m*-Xylene
Chlorobenzene *p*-Xylene

DIN EN ISO 10301 - Halogenated VOCs

Determination of water, waste water and sludge for low volatile halogenated hydrocarbons by GC.

DINENISO-10301 1 x 1 mL
1 µg/mL each in MeOH 17 comps.

Dichloromethane 1,2-Dichloropropane
Trichloromethane 1,3-Dichloropropane
Carbon tetrachloride 1,3-Dichloropropene
1,1-Dichloroethane Dibromomethane
1,2-Dichloroethane Tribromoethene
1,1,1-Trichloroethane Bromochloromethane
1,1,2-Trichloroethane Bromodichloromethane
Trichloroethene Dibromochloromethane
Tetrachloroethene

Volatiles Calibration Curve Mix 1

AE-00039-CAL-SET 5 x 1 mL
1 µg/mL, 5 µg/mL, 10 µg/mL, 50 µg/mL, 100 µg/mL
Each comp. in MeOH 5 comps.

Dichloromethane 1,1,1-Trichloroethane
Tetrachloroethene Trichloroethene
Tetrachloromethane

Volatiles Calibration Curve Mix 2

AE-00040-CAL-SET 5 x 1 mL
1 µg/mL, 5 µg/mL, 10 µg/mL, 50 µg/mL, 100 µg/mL
Each comp. in MeOH 6 comps.

Chloroform Tetrachloromethane
Dichloromethane 1,1,1-Trichloroethane
Tetrachloroethene Trichloroethene

Chlorinated Organic Volatile

Calibration Standards

Appendix 2, Drinking Water Regulation of May 22, 1986.

Compound	Cat. No.	Each at 100 µg/mL in MeOH 1 mL
1,1,1-Trichloroethane	APP-9-202	
Trichloroethene	APP-9-204	
Tetrachloroethene	APP-9-194	
Dichloromethane	APP-9-074	
Carbon tetrachloride	APP-9-036	

Nitroaromatic Compounds

DIN-38407-17 Nitroaromatic Compounds

Examination of water, wastewater, and sludge for the determination of selected nitroaromatic compounds by Gas-Liquid Chromatography

DIN38407-17 1 x 1 mL
500 µg/mL each in MeOH 12 comps.

Nitrobenzene 3,4-Dinitrotoluene
2-Nitrotoluene 2-Amino-6-nitrotoluene
4-Nitrotoluene 4-Amino-2-nitrotoluene
1,3-Dinitrobenzene 4-Amino-2,6-dinitrotoluene
2,6-Dinitrotoluene 2-Amino-4,6-dinitrotoluene
2,4-Dinitrotoluene 2,4,6-Trinitrotoluene

Explosives

DIN 38407-21 Explosives

Examination of water, wastewater, and sludge for determination of selected explosives and related compounds by HPLC with UV detection

DIN38407-21-A 1 x 1 mL
10 µg/mL each in MeOH 12 comps.

Picric acid Nitroglycerin
HMX TNT
RDX 2-Nitrotoluene
Tetryl PETN
EGDN 4-Nitrotoluene
DEGDN 3-Nitrotoluene

DIN 38407-21 Related Compounds

Examination of water, wastewater, and sludge for determination of selected explosives and related compounds by HPLC with UV detection

DIN38407-21-B 1 x 1 mL
10 µg/mL each in MeOH:AcCN (98:2) 8 comps.

1,3,5-Trinitrobenzene
1,3-Dinitrobenzene
4-Amino-2,6-dinitrotoluene
2,2',4,4',6,6'-Hexanitrodiphenylamine
2-Amino-4,6-dinitrotoluene
2,6-Dinitrotoluene
2,4-Dinitrotoluene
Diphenylamine

PAHs

DIN 38407-8 PAH Mix (WHO 6 List)

Determination of PAH in water, wastewater and sludge by HPLC.

DIN38407-8-PAH

2 µg/mL each in Acetonitrile

1 x 1 mL

6 comps.

Fluoranthene	Benzo[a]pyrene
Benzo[b]fluoranthene	Benzo[k]fluoranthene
Benzo[g,h,i]perylene	Indeno[1,2,3-cd]pyrene

DIN 38407-18 PAH Solution

Examination of water, wastewater, and sludge for the determination of 15 polycyclic aromatic hydrocarbons (PAH) by HPLC with fluorescence detection.

DIN38407-18

10 µg/mL each in Acetonitrile

1 x 1 mL

15 comps.

Naphthalene	Benzo[k]fluoranthene
Acenaphthene	Benzo[a]pyrene (Ames grade)
Fluorene	Dibenz[a,h]anthracene
Phenanthrene	Benzo[g,h,i]perylene
Anthracene	Pyrene
Fluoranthene	Benzo[a]anthracene
Chrysene	Indeno[1,2,3-cd]pyrene
Benzo(b)fluoranthene	

DIN 38414-23 PAHs

Determination of 15 PAHs in water, waste water and sludge by HPLC and Fluorescence detection.

DIN38414-23

10 µg/mL each in Acetonitrile

1 x 1 mL

15 comps.

Naphthalene	Benzo[k]fluoranthene
Acenaphthene	Benzo[a]pyrene (Ames grade)
Fluorene	Dibenz[a,h]anthracene
Phenanthrene	Benzo[g,h,i]perylene
Anthracene	Pyrene
Fluoranthene	Benzo[a]anthracene
Chrysene	Indeno[1,2,3-cd]pyrene
Benzo[b]fluoranthene	

PAH Standard Kits and Solutions

The following mixtures and kits have been prepared to meet the needs of laboratories utilizing European and USEPA methodologies. Minimum purity 99%, except where indicated.

PAH Mix #1

Regulations for drinking water analysis, (E-DIN 38407-F-18, E-DIN 38414-F-21). Regulations for sediment and sludge

AE-00025

1 x 1 mL

AE-00025-10ML

1 x 10 mL

At stated conc. in Acetonitrile

16 comps.

Acenaphthene	(25 µg/mL)	Chrysene	(20 µg/mL)
Acenaphthylene	(25 µg/mL)	Dibenz[a,h]anthracene	(40 µg/mL)
Anthracene	(25 µg/mL)	Fluoranthene	(40 µg/mL)
Benzo[a]anthracene	(10 µg/mL)	Fluorene	(40 µg/mL)
Benzo[b]fluoranthene	(25 µg/mL)	Indeno[1,2,3-cd]pyrene	(25 µg/mL)
Benzo[k]fluoranthene	(10 µg/mL)	Naphthalene	(50 µg/mL)
Benzo[g,h,i]perylene	(25 µg/mL)	Phenanthrene (98%)	(30 µg/mL)
Benzo[a]pyrene	(20 µg/mL)	Pyrene	(40 µg/mL)

PAH Mix #2

For European methods according to customer requests.

AE-00045

1 x 1 mL

AE-00045-10ML

1 x 10 mL

At stated conc. in Acetonitrile

7 comps.

Benzo[b]fluoranthene	(2 µg/mL)	Fluoranthene	(10 µg/mL)
Benzo[k]fluoranthene	(2 µg/mL)	Indeno[1,2,3-cd]pyrene	(2 µg/mL)
Benzo[g,h,i]perylene	(2 µg/mL)	Perylene	(10 µg/mL)
Benzo[a]pyrene	(2 µg/mL)		

PAH Mix #3

German method for drinking water analysis.

AE-00032

1 x 1 mL

AE-00032-10ML

1 x 10 mL

10 µg/mL each in Acetonitrile

7 comps.

Benzo[b]fluoranthene	Fluoranthene
Benzo[k]fluoranthene	Indeno[1,2,3-cd]pyrene
Benzo[g,h,i]perylene	Perylene
Benzo[a]pyrene	

PAH Mix #4

For European methods according to customer requests.

AE-00033

1 x 1 mL

AE-00033-10ML

1 x 10 mL

In Acetonitrile

7 comps.

Benzo[b]fluoranthene	(20 µg/mL)	Fluoranthene	(50 µg/mL)
Benzo[k]fluoranthene	(20 µg/mL)	Indeno[1,2,3-cd]pyrene	(40 µg/mL)
Benzo[g,h,i]perylene	(20 µg/mL)	Perylene	(20 µg/mL)
Benzo[a]pyrene	(20 µg/mL)		

ISO/DIS 22032 PBDEs in Sediment & Sludge

DRAFT INTERNATIONAL STANDARD

ISO/DIS 22032 Calibration Curve Set

ISO/DIS-22032-SET

At stated conc. (ng/mL) in Isooctane

ISO/DIS-22032 (Congener No.)	01	02	03	04	05	06	07
2,2',4,4'-Tetrabromodiphenyl ether (#47)	5	12.5	25	50	100	150	250
2,2',4,4',5-Pentabromodiphenyl ether (#99)	5	12.5	25	50	100	150	250
2,2',4,4',6-Pentabromodiphenyl ether (#100)	5	12.5	25	50	100	150	250
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)	5	12.5	25	50	100	150	250
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)	5	12.5	25	50	100	150	250
2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183)	5	12.5	25	50	100	150	250
2,3,3',4,4',5,5',6-Octabromodiphenyl ether (#205)	5	12.5	25	50	100	150	250
2,2',3,3',4,4',5,5',6,6'-Decabromodiphenyl ether (#209)	25	50	100	200	500	700	1000

Internal Standard for BDE# 47, 99 and 100

ISO22032-IS-1-5ML

1 x 5 mL

ISO22032-IS-1-10ML

1 x 10 mL

100 ng/mL each in Isooctane

3,3',4,4'-Tetrabromodiphenyl ether

Internal Standard for BDE# 153, 154 and 183

ISO22032-IS-2-5ML

1 x 5 mL

ISO22032-IS-2-10ML

1 x 10 mL

100 ng/mL each in Isooctane

2,2',3,4,4',5,6-Heptabromodiphenyl ether

Aliphatic, Aromatic Amines and Derivatives

Aryl Amine Multi-Component Solution

AE-00049-SET
2 x 1 mL

10 µg/mL each in Ethyl acetate

24 comps. (Includes AE-00049-R1 plus RAC-08)

AE-00049-R1
1 mL

10 µg/mL each in Ethyl acetate

23 comps.

<i>o</i> -Aminoazotoluene	3,3'-Dimethyl-4,4'-diaminodiphenylmethane
4-Aminobiphenyl	4,4'-Methylenebis(2-chloroaniline)
2-Amino-4-nitrotoluene	2-Naphthylamine
Benzidine	4,4'-Oxydianiline
4-Chloroaniline	4,4'-Thiodianiline
4-Chloro- <i>o</i> -toluidine	<i>o</i> -Toluidine
<i>p</i> -Cresidine	2,4,5-Trimethylaniline
4,4'-Diaminodiphenylmethane	<i>p</i> -Aminoazobenzene
2,4-Diaminotoluene	2-Aminobiphenyl
3,3'-Dichlorobenzidine	<i>o</i> -Anisidine
3,3'-Dimethoxybenzidine	3-Chloro- <i>o</i> -toluidine
3,3'-Dimethylbenzidine	

RAC-08
1 mL

100 µg/mL each in Pyridine

2,4-Diaminoanisole

Note: 2,4-Diaminoanisole is introduced with the sulfate hydrate

Halo Acetic Acids

DIN 38407-25 Selected Halo Acetic Acids

DIN38407-25
1 x 1 mL

10 µg/mL in MtBE

7 comps.

Bromochloroacetic acid
 Dalapon
 Dibromoacetic acid
 Dichloroacetic acid
 Bromoacetic acid
 Chloroacetic acid
 Trichloroacetic acid

EFSA for Isopropylthioxanthone (ITX)

Responding to the hazard found in Italy, France, Spain, and Portugal, AccuStandard has formulated Isopropylthioxanth-9-one (a photographic chemical) found in baby milk in Italy. The 2-isomer as well as the technical mixture also contains the 4-isomer.

2-Isopropylthioxanthone (ITX)

EFSA-ITX-01
1 x 1 mL

1.0 mg/mL in Isooctane

2-Isopropylthioxanth-9-one

Isopropylthioxanthone (ITX)

Mixed Isomers
EFSA-ITX-02
1 x 1 mL

1.0 mg/mL in Isooctane

2- and 4- Isopropylthioxanth-9-one



Service with a smile

Pesticide Standards

The following Pesticide Standards are for German Regulations (for residue thresholds), Swiss Regulations (for components and contaminants in food), and DFG collected methods.

Pesticide / Congener Mix #1

AE-00010 1 x 1 mL
AE-00010-10ML 1 x 10 mL
At stated conc. (µg/mL) in Toluene 31 comps.

2,4,4'-Trichlorobiphenyl	1
2,2',5,5'-Tetrachlorobiphenyl	1
2,2',4,5,5'-Pentachlorobiphenyl	1
2,2',3,4,4',5'-Hexachlorobiphenyl	1
2,2',4,4',5,5'-Hexachlorobiphenyl	1
2,2',3,4,4',5,5'-Heptachlorobiphenyl	1
Aldrine	10
cis-Chlordane	10
trans-Chlordane	10
oxy-Chlordane	10
o,p'-DDD	10
p,p'-DDD	10
o,p'-DDE	10
p,p'-DDE	10
o,p'-DDT	10
p,p'-DDT	10
Dieldrine	10
Endosulfan I	10
Endosulfan II	10
Endrine	10
α-HCH	10
β-HCH	10
γ-HCH	10
δ-HCH	10
Heptachlor	10
cis-Heptachlorepoxide	10
trans-Heptachlorepoxide	10
Hexachlorbenzene	10
Isodrin	10
Methoxychlor	10
Mirex	10

Pesticide Mix #2

AE-00011 1 x 1 mL
AE-00011-10ML 1 x 10 mL
10 µg/mL each in Toluene 22 comps.

Anilazine	Tecnacene
Captan	Tetradifon
Chlorthalonil	Tetrasul
Clorfenson	Tridiametofon
Dichlofluanid	Tridiamenol
Dicofol	Trifluarin
Endosulfane-sulfate	Pentachloroaniline
Fenson	Procymidon
Folpet	Propyzamid
Imazalil	Quintozen
Iprodion	Vinclozolin

Pesticide Mix #3

AE-00012 1 x 1 mL
AE-00012-10ML 1 x 10 mL
At stated conc. (µg/mL) in Toluene 10 comps.

Captafol	200
Captan	100
Demethon-S-methyl	500
Demethon-S-methyl-sulfone	500
Dicofol	200
Pentachlorophenol	100
Tetrachlorvinphos	10
Trichlorfon	100
Tolyfluand	100
Vamidithion	200

Pesticide Mix #4

AE-00013 1 x 1 mL
AE-00013-10ML 1 x 10 mL
At stated conc. (µg/mL) in Toluene 5 comps.

Cyproconazole	500
Hexaconazole	500
Penconazole	500
Tebuconazole	500
Tetrachlorvinphos	10

Pesticide Mix #5

AE-00014 1 x 1 mL
AE-00014-10ML 1 x 10 mL
At stated conc. (µg/mL) in Ethyl acetate 8 comps.

Atrazine	200
Cyanazine	200
Desmertryn	500
Metribuzin	500
Prometryne	500
Simazine	200
Terbutryn	500
Tetrachlorvinphos	10

Tetrachlorvinphos Surrogate / Internal Standard

AE-00047 1 x 1 mL
1000 µg/mL in Acetonitrile

Tetrachlorvinphos

Pesticide Mix #6

AE-00015 1 x 1 mL
AE-00015-10ML 1 x 10 mL
At stated conc. (µg/mL) in Toluene 8 comps.

Chlorpyrifos-methyl	100
Diazinon	100
Ethion	100
Etrifos	50
Iodofenphos	200
Malathion	100
Phosphamidon	200
Tetrachlorvinphos	10

Pesticide Mix #7

AE-00016 1 x 1 mL
AE-00016-10ML 1 x 10 mL
At stated conc. (µg/mL) in Toluene 8 comps.

Bromophos-methyl	100
Bromophos-ethyl	150
Fenitrothion	200
Methacryfos	150
Omethoate	150
Phosalone	100
Tetrachlorvinfos	10
Tolclofos-methyl	100

Pesticide Mix #8

AE-00017 1 x 1 mL
AE-00017-10ML 1 x 10 mL
At stated conc. (µg/mL) in Toluene:Acetone:Hexane (90:5:5) 6 comps.

Chlorbufam	500
Chlorpropham	500
Dichlobenil	200
Imazalil	500
Pyrazon	500
2,3,5,6-Tetrachloronitrobenzene	100

Pesticide Mix #9

AE-00018 1 x 1 mL
AE-00018-10ML 1 x 10 mL
At stated conc. (µg/mL) in Toluene 9 comps.

Azinophos-ethyl	100
Fenchlorvos	100
Fonophos	150
Methidathion	100
Mevinphos	200
Parathion-ethyl	150
Parathion-methyl	100
Pirimiphos-methyl	100
Tetrachlorvinphos	10

Pesticide Mix #10

AE-00019 1 x 1 mL
AE-00019-10ML 1 x 10 mL
At stated conc. (µg/mL) in Toluene 7 comps.

Benalaxyl	500
Carbaryl	500
Oxadixyl	500
Terbutylazine	250
Tetrachlorvinphos	10
Triadimefon	500
Triadimenol	500

**Pesticide Standards continued
on next page**

Pesticide Standards

The following Pesticide Standards are for German Regulations (for residue thresholds), Swiss Regulations (for components and contaminants in food), and DFG collected methods.

Pesticide Mix #11

AE-00020 1 x 1 mL
AE-00020-10ML 1 x 10 mL
 10 µg/mL each in Toluene 19 comps.

Aldrin	β-HCH
Chloridazon	γ-HCH
o,p'-DDD	δ-HCH
p,p'-DDD	Heptachlor
o,p'-DDE	cis-Heptachlorepoxide
p,p'-DDE	trans-Heptachlorepoxide
o,p'-DDT	Hexachlorobenzene
p,p'-DDT	Tecnazene
Endrin	Tetrachlorvinphos
α-HCH	

Pesticide Mix #12

AE-00021 1 x 1 mL
AE-00021-10ML 1 x 10 mL
 At stated conc. (µg/mL) in Toluene 9 comps.

Carbophenithion	100
Disulfoton	150
Fenthion	100
Methamidophos	100
Phorate	150
Phorate-sulfatone	100
Phorate-sulfone	150
Tetrachlorvinphos	10
Thiomethon	100

Pesticide Mix #13

AE-00022 1 x 1 mL
AE-00022-10ML 1 x 10 mL
 At stated conc. (µg/mL) in Toluene 8 comps.

Chlorfenvinphos (CFVP)	100
Chlorpyrifos	100
Dichlorvos	100
Dimethoate	100
Heptenophos	100
Quinalphos	100
Tetrachlorvinphos	10
Triazophos	100

Pesticide Mix #14

AE-00023 1 x 1 mL
AE-00023-10ML 1 x 10 mL
 At stated conc. (µg/mL) in Toluene 10 comps.

Cyfluthrin	500
λ-Cyhalothrin	500
Cypermethrin	500
Deltamethrin	500
Dichloran	100
Fenvalerate	500
Pendimethalin	100
Permethrin	500
Tefluthrin	100
Tetrachlorvinphos	10

Regulations for drinking water and water used in food manufacturing, May 27, 1986, BGBl, I, S. 760.

Pesticide Mix #15

AE-00024 1 x 1 mL
AE-00024-10ML 1 x 10 mL
 0.02 µg/mL each in Ethyl acetate 33 comps.

Atrazine	Linuron
Bifenox	Pencycuron
Bromacil	Pendimethalin
Carbetamide	Prometryne
Chloridazo	Propazine
Chloroxuron	Metamitron
Chlorpropham	Metazachlor
Chlortoluron	Methabenzthiazuron
Crimidine	Methoprotryne
Cyanazine	Metobromuron
Desethylatrazine	Metolachlor
Desisopropylatrazine	Monolinuron
Desethylterbutylazine	Sebutylazin
Dimefuron	Simazine
Diuron	Terbutryn
Isoproturon	Terbutylazine
Karbutilate	

Regulations for drinking water analysis, (E-DIN 38407-F-18, E-DIN 38414-F-21)
 Regulations for sediment and sludge.

Pesticide Mix #16

AE-00030 1 x 1 mL
AE-00030-10ML 1 x 10 mL
 10 µg/mL each in Ethyl acetate 20 comps.

Aldicarb	Lindane
Atrazine	MCPA *
Bentazone *	Mecoprop *
Chlortofuron	Metazachlor
Cyanazine	Metobromuron
2,4-D *	Metoxuron
Dichlorprop *	Sebutylazin
1,3-Dichloropropene	Simazine
Endosulfan I	Terbutylazine
Endosulfan II	
Isoproturon	* Underivatized

Regulations - Test methods for organochlorine and organophosphorus compounds and pyrethroid
 Current Science and Technology, German Book of Medicine (1996).

Pesticide Mix #17

AE-00027 1 x 1 mL
AE-00027-10ML 1 x 10 mL
 10 µg/mL each in Toluene 14 comps.

Alachlor	Methyl pentachlorophenyl sulfide
Bromopropylate	Pentachloraniline
Carbophenothion	cis-Permethrin
Cypermethrin	trans-Permethrin
Deltamethrin	Piperonyl butoxide
Endosulfane sulfate	Pyrethrins
Fenvalerate	Quintozene

Pesticide Mix #18

AE-00028 1 x 1 mL
AE-00028-10ML 1 x 10 mL
 10 µg/mL each in Toluene 16 comps.

Azinphos-methyl	Ethyl parathion
Carbophenothion	Fenitrothion
Chlorfenvinphos	Fonofos
Chlorpyrifos-ethyl	Methyl parathion
Chlorpyrifos-methyl	Malathion
Diazinon	Methidathion
Dichlorphos	Phosalone
Ethion	Pirimiphos-methyl

Pesticide Mix #19

AE-00029 1 x 1 mL
AE-00029-10ML 1 x 10 mL
 10 µg/mL each in Toluene 13 comps.

Chlorpyrifos-methyl	Fenitrothion
p,p'-DDT	Lindane
Deltamethrin	Methyl parathion
Dichlorvos	Phosalone
Dieldrin	Quintozene
Endosulfan sulfate	Tecnazene
Ethion	

Pesticide Standards

Pesticide Mix #20

AE-00050 1 x 1 mL
AE-00050-10ML 1 x 10 mL
10 µg/mL each in Ethyl acetate 20 comps.

Aldicarb	Isoproturon
Atrazine	γ-BHC
Bentazon	MCPA
Chlortoluron	MCPP acid
Cyanazine	Metazachlor
2,4-D	Metobromuron
Dichlorprop	Metoxuron
1,1-Dichloropropene	Sebutylazin
Endosulfan I	Simazine
Endosulfan II	Terbutylazine

Pesticide Mix #20

Regulation DIN V 38407 Part 12 Method F12
AE-00031 1 x 1 mL
AE-00031-10ML 1 x 10 mL
10 µg/mL each in Ethyl acetate 17 comps.

Atrazine	Metazachlor
Chlortoluron	Methabenzthiazuron
Cyanazine	Metobromuron
Desethyl atrazine	Metolachlor
Hexazinone	Metoxuron
Isoproturon	Monolinuron
Karmex	Sebutylazin
Linuron	Simazine
	Terbutylazine

Pesticide Mix #21

AE-00051 1 x 1 mL
10 µg/mL each in Cyclohexane 16 comps.

Aldrin	Endrin
p,p'-DDD	Heptachlor
p,p'-DDE	Heptachlor epoxide (isomer B)
o,p'-DDT	Hexachlorobenzene
p,p'-DDT	α-BHC
Dieldrin	β-BHC
Endosulfan I	γ-BHC
Endosulfan II	Methoxychlor

Pesticide Mix #22

AE-00052 1 x 1 mL
AE-00052-10ML 1 x 10 mL
10 µg/mL each in Acetonitrile 8 comps.

Atrazine	Metoxuron
Desethyl atrazine	Propazine
Bromacil	Simazine
Chloridazon	Terbutylazine

Pesticide Mix #23

AE-00053 1 x 1 mL
AE-00053-10ML 1 x 10 mL
10 µg/mL each in Acetonitrile 6 comps.

2,4-D	MCPA
2,4-DB	MCPB
Dichlorprop	MCPP acid

Pesticide Mix #24

AE-00054 1 x 1 mL
AE-00054-10ML 1 x 10 mL
At stated conc. (µg/mL) in Cyclohexane 6 comps.

Aldrin	0.2	α-BHC	0.15
p,p'-DDT	0.4	γ-BHC	0.15
Dieldrin	0.3	Heptachlor	0.2

Pesticide Mix #25

AE-00055 1 x 1 mL
AE-00055-10ML 1 x 10 mL
10 µg/mL each in Cyclohexane 4 comps.

α-BHC	γ-BHC
β-BHC	δ-BHC

Pesticide Mix #26

AE-00056 1 x 1 mL
AE-00056-10ML 1 x 10 mL
1.0 µg/mL each in Cyclohexane 5 comps.

α-BHC	δ-BHC
β-BHC	ε-BHC
γ-BHC	

Pesticide Mix #27

AE-00057 1 x 1 mL
AE-00057-10ML 1 x 10 mL
1.0 µg/mL each in Isooctane 13 comps.

α-BHC	p,p'-DDE
β-BHC	Dieldrin
γ-BHC	Endrin
δ-BHC	Heptachlor epoxide (isomer B)
o,p'-DDD	Methoxychlor
p,p'-DDD	Mirex
o,p'-DDE	

2-Part Label System

Smudgeproof, tear and solvent resistant *

(Organic products in ampules)

Part One can be placed into a laboratory journal to document the standard used for the analysis. This label section includes the catalog number, description, lot number, expiration date safety information, proper storage conditions and documents AccuStandard as the manufacturer.

Part Two duplicates required information for labeling transfer vial(s) with correct information.

* Includes the most common solvents: Methylene chloride, Methanol and Acetone



Pesticide Standards

ISO 6468 Pesticide Standard

Water quality determination of certain organochlorine insecticides, polychlorine biphenyls and chlorobenzenes by GC after liquid-liquid extraction.

ISO6468-PEST 1 x 1 mL
10 µg/mL each in *n*-Hexane 19 comps.

α-BHC	p,p'-DDT
β-BHC	Methoxychlor
γ-BHC	Aldrin
δ-BHC	Dieldrin
o,p'-DDE	Endrin
p,p'-DDE	Heptachlor
o,p'-DDD	Heptachlor epoxide (Isomer A)
p,p'-DDD	Heptachlor epoxide (Isomer B)
o,p'-DDT	Endosulfan I
	Endosulfan II

EN ISO 10695 Pesticide Mix

Water quality determination of selected organic nitrogen and phosphorous compound by GC.

ENISO10695-PEST 1 x 1 mL
10 µg/mL each in Acetone 12 comps.

Atrazine	Propazine
Cyanazine	Sebuthylazin
Metazachlor	Simazine
Parathion	Terbuthylazine
Methyl parathion	Trifluralin
Pendimethalin	Vinclozolin

DIN 38407-2 Pesticide Standard

Determination of water, waste water and sludge for low volatile halogenated hydrocarbons by GC.

DIN38407-2-PEST 1 x 1 mL
10 µg/mL each in *n*-Hexane 17 comps.

Aldrin	Endrin
p,p'-DDD	Heptachlor
o,p'-DDE	Heptachlor epoxide (Isomer A)
p,p'-DDE	Heptachlor epoxide (Isomer B)
o,p'-DDT	α-BHC
p,p'-DDT	β-BHC
Dieldrin	γ-BHC
Endosulfan I	Methoxychlor
Endosulfan II	

EN ISO 11369 Pesticide Mix 20

Regulation DIN V 38407 Part 12 Method F12

AE-00031 1 x 1 mL
AE-00031-10ML 1 x 10 mL
10 µg/mL each in Ethyl acetate 17 comps.

Atrazine	Methabenzthiazuron
Chlortoluron	Metobromuron
Cyanazine	Metolachlor
Desethyl atrazine	Metoxuron
Hexazinone	Monolinuron
Isoproturon	Sebuthylazin
Karmex (Diuron)	Simazine
Linuron	Terbuthylazine
Metazachlor	

DIN V 38407-11 Pesticide Mix

Scope: Determination of plant protection agents in water, wastewater and sludge.

DINV38407-11-PST 1 x 1 mL
DINV38407-11-PST-PAK 5 x 1 mL
5 µg/mL each in Acetonitrile 21 comps.

Alachlor	Monuron
Atrazine	Parathion
Chlorfenvinphos	Pendimethalin
Chlortoluron	Propazine
Cyanazine	Sebuthylazin
2,4-D	Simazine
MCPA acid	2,4,5-T
Metazachlor	Terbuthylazine
Metobromuron	Trifluralin
Metolachlor	Vinclozolin
Metoxuron	

DIN 38407-14 Methyl Esters Mix

Examination of water, wastewater and sludge for phenoxyalkyl carbonic acids by GC and MS detection after solid-liquid extraction and derivatization.

DIN38407-14-ME 1 x 1 mL
500 µg/mL each in *n*-Hexane 8 comps.

Mecoprop methyl ester
MCPA methyl ester
Dichlorprop methyl ester
2,4-D methyl ester
Fenoprop methyl ester
MCPB methyl ester
2,4,5-T methyl ester
2,4-DB methyl ester

DIN 38407-22 Glyphosate & AMPA

Examination of water, wastewater, and sludge for Glyphosate and Aminomethyl phosphonic acid (AMPA)

DIN38407-22 1 x 1 mL
100 µg/mL each in Water 2 comps.

Glyphosate
Aminomethylphosphonic acid

Pesticide Mix 16

Regulations for drinking water analysis, (E-DIN 38407-F-18, E-DIN 38414-F-21) Regulations for sediment and sludge.

AE-00030 1 x 1 mL
AE-00030-10ML 1 x 10 mL
10 µg/mL each in Ethyl acetate 20 comps.

Aldicarb	Lindane
Atrazine	MCPA *
Bentazone *	Mecoprop *
Chlortoluron	Metazachlor
Cyanazine	Metobromuron
2,4-D *	Metoxuron
Dichlorprop *	Sebuthylazine
1,3-Dichloropropene	Simazine
Endosulfan I	Terbuthylazine
Endosulfan II	
Isoproturon	* Underivatized

DIN 38407-14 Acid Mix

Examination of water, wastewater and sludge for phenoxyalkyl carbonic acids by GC and MS detection after solid-liquid extraction and derivatization.

DIN38407-14-ACID 1 x 1 mL
500 µg/mL each in *n*-Hexane 8 comps.

Mecoprop acid
MCPA acid
Dichlorprop acid
2,4-D acid
Fenoprop acid
MCPB acid
2,4,5-T acid
2,4-DB acid

Phenols & Derivatives

DIN EN 12673 Chlorophenols

Scope: Determination of selected chlorophenols in water by GC

DINEN-12673

At stated conc. (µg/mL) in Ethanol

1 x 1 mL
19 comps.

2-Chlorophenol	30	2,3,5-Trichlorophenol	3
3-Chlorophenol	30	2,3,6-Trichlorophenol	3
4-Chlorophenol	30	2,4,5-Trichlorophenol	3
2,3-Dichlorophenol	4	2,4,6-Trichlorophenol	3
2,4-Dichlorophenol	4	3,4,5-Trichlorophenol	3
2,5-Dichlorophenol	4	2,3,4,5-Tetrachlorophenol	2
2,6-Dichlorophenol	4	2,3,4,6-Tetrachlorophenol	2
3,4-Dichlorophenol	4	2,3,5,6-Tetrachlorophenol	2
3,5-Dichlorophenol	4	Pentachlorophenol	1
2,3,4-Trichlorophenol	3		

DIN EN ISO 17495 Nitrophenols

Scope: determination of selected nitrophenols by solid-phase extraction and gas chromatography with mass spectrometric detection.

DINENISO-17495 1 x 1 mL
500 µg/mL each in Acetone 14 comps.

2,4-Dinitrophenol	2-Nitrophenol
2,5-Dinitrophenol	3-Nitrophenol
2,6-Dinitrophenol	4-Nitrophenol
2-Methyl-4,6-dinitrophenol	4-Methyl-2-nitrophenol
2,6-Dimethyl-4-nitrophenol	3-Methyl-4-nitrophenol
2,4-Dichlor-6-nitrophenol	5-Methyl-2-nitrophenol
2,6-Dichlor-4-nitrophenol	3-Methyl-2-nitrophenol

ENISO 9377 Determination of Hydrocarbon Oil Index

Diesel #2/Mineral Oil Standard
ENISO9377-2-1 1 x 1 mL
 10000 µg/mL total hydrocarbons in Hexane
 2 comps.
 #2 Diesel Fuel (5000 µg/mL)
 Mineral Oil (5000 µg/mL)

Quality Control Standard Mix
ISO/DIS9377-4-1 1 x 1 mL
 1000 µg/mL total hydrocarbons in Acetone
 2 comps.
 #2 Diesel Fuel (500 µg/mL)
 Mineral Oil (500 µg/mL)

Extraction Solvent Stock Solution
ENISO9377-2-3 1 x 5 mL
 At stated conc. in Hexane
 2 comps.
 n-Decane (20 µL/L)
 n-Tetracontane (20 mg/L)

System Performance Standard of n-alkanes
ENISO9377-2-2 1 x 1 mL
 50 µg/mL each in Hexane
 16 comps.

n-Decane	n-Hexacosane
n-Dodecane	n-Octacosane
n-Tetradecane	n-Triacontane
n-Hexadecane	n-Dotriacontane
n-Octadecane	n-Tetratriacontane
n-Eicosane	n-Hexatriacontane
n-Docosane	n-Octatriacontane
n-Tetracosane	n-Tetracontane

Stearyl Stearate Test Solution
ISO/DIS9377-4-2 1 x 10 mL
 2000 µg/mL in Cyclohexane
 Stearyl stearate

ISO/DIS 9377-4 Standard Mix Stock Solution
TPH-006-10X 1 x 1 mL
TPH-006-10X-PAK SAVE 5 x 1 mL
 5000 µg/mL each in Cyclohexane
 2 comps.
 #2 Diesel fuel
 Mineral oil

Florisl Cartridge QC Standard Mix
ENISO9377-2-4 1 x 10 mL
 2000 µg/mL total hydrocarbons in Hexane
 2 comps.
 #2 Diesel Fuel (1000 µg/mL)
 Mineral Oil (1000 µg/mL)

European Equivalents of Alcohol Oxidation Products in Automotive Engine Exhaust by HPLC of DNPH Derivatives

Carbonyl-DNPH Mix #1
AE-00043 1 x 1 mL
 20 µg/mL each in Acetonitrile
 13 comps.
 Acetaldehyde-DNPH
 Acetone-DNPH
 Acrolein-DNPH
 Benzaldehyde-DNPH
 Butanonal-DNPH
 Methyl ethyl ketone-DNPH
 Crotonaldehyde-DNPH
 Formaldehyde-DNPH (40 µg/mL)
 Hexanal-DNPH
 Methacrolein-DNPH
 Propionaldehyde-DNPH
 p-Tolualdehyde-DNPH
 Valeraldehyde-DNPH

Carbonyl-DNPH Mix #2
AE-00044 1 x 1 mL
 2 µg/mL each in Acetonitrile
 14 comps.
 Acetaldehyde-DNPH
 Acetone-DNPH
 Acrolein-DNPH
 Benzaldehyde-DNPH
 Butanone-DNPH
 n-Butyraldehyde-DNPH
 Crotonaldehyde-DNPH
 Cyclohexanone-DNPH (5 µg/mL)
 Formaldehyde-DNPH (4 µg/mL)
 Hexanal-DNPH
 Methacrolein-DNPH
 Propionaldehyde-DNPH
 p-Tolualdehyde-DNPH
 Valeraldehyde-DNPH

Cyclohexanone
AE-00046 1 x 1 mL
 500 µg/mL in Acetonitrile
 Cyclohexanone-DNPH



Thousands of Standards, just a click away
AccuStandard.com



Regional Standards

Pacific Rim Methodologies

Japan Ministry of Health and Welfare Standards

Volatile Organic Solution

JMHW-001 1 x 1 mL
JMHW-001-PAK **SAVE** 5 x 1 mL
1000 µg/mL each in MeOH 23 comps.

Benzene
Bromodichloromethane
Bromoform
Carbon tetrachloride
Chloroform
Dibromochloromethane
1,4-Dichlorobenzene
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
Dichloromethane
1,2-Dichloropropane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
m-Xylene
o-Xylene
p-Xylene

Volatile Organic Solution

JMHW-002 1 x 1 mL
JMHW-002-PAK **SAVE** 5 x 1 mL
2000 µg/mL each in MeOH 16 comps.

Benzene
Bromodichloromethane
Bromoform
Carbon tetrachloride
Chloroform
Dibromochloromethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
Dichloromethane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Tetrachloroethene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene

Volatile Organic Solution B

JMHW-003 1 x 1 mL
JMHW-003-PAK **SAVE** 5 x 1 mL
2000 µg/mL each in MeOH 7 comps.

1,4-Dichlorobenzene
trans-1,2-Dichloroethene
1,2-Dichloropropane
Toluene
m-Xylene
o-Xylene
p-Xylene

Tuning Solution/Surrogate

Standard Mixture
CLP-004-100X 1 x 1 mL
CLP-004-100X-PAK **SAVE** 5 x 1 mL
2.5 mg/mL in MeOH
p-Bromofluorobenzene

Method of Interests

Japanese Methods JIS-K0311 and JIS-K0312
See EPA Method 1613 Dioxins & Furans which can be used for EPA
Method 23, 8280, 8290 and EU Method EN-1948

Japan Environmental Agency Standards

Volatile Organic Solution

JEAM-001 1 x 1 mL
JEAM-001-PAK **SAVE** 5 x 1 mL
1000 µg/mL each in MeOH 12 comps.

Benzene
Carbon Tetrachloride
1,1-Dichloroethene
cis-1,2-Dichloroethene
Dichloromethane
1,2-Dichloroethane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Tetrachloroethene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene

Method Aldehydes as DNPH Derivatives

JEAM-002 1 x 1 mL
JEAM-002-PAK **SAVE** 5 x 1 mL
100 µg/mL each in Ethyl acetate 6 comps.

Acetaldehyde-DNPH
Butyraldehyde-DNPH
Isobutyraldehyde-DNPH
Isovaleraldehyde-DNPH
Propionaldehyde-DNPH
Pentanal-DNPH

Internal Standard

M-524-IS 1 x 1 mL
M-524-IS-PAK **SAVE** 5 x 1 mL
2.0 mg/mL each in MeOH 2 comps.

1,2-Dichlorobenzene-*d*₄
Fluorobenzene

Drinking Water Odor Standard

ODOR-JDWOS 1 x 1 mL
100 µg/mL each in MeOH 2 comps.
(+/-) Geosmin
2-methylisoborneol

Korean Drinking Water Regulations Standards

VOC Mix A

KDWR-001 1 x 1 mL
KDWR-001-PAK **SAVE** 5 x 1 mL
100 µg/mL each in MeOH 15 comps.

Benzene
Bromodichloromethane
Bromoform
Chloroform
Dibromochloromethane
Ethylbenzene
Dichloromethane
Phenol
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
Trichloroethene
m-Xylene
p-Xylene
o-Xylene

VOC Mix B

KDWR-002 1 x 1 mL
KDWR-002-PAK **SAVE** 5 x 1 mL
100 µg/mL each in MeOH 8 comps.

Bromodichloromethane
Bromoform
Chloroform
Dibromochloromethane
Dichloromethane
Tetrachloroethene
1,1,1-Trichloroethane
Trichloroethene

Pesticide Mix

KDWR-003 1 x 1 mL
KDWR-003-PAK **SAVE** 5 x 1 mL
1000 µg/mL each in MeOH 5 comps.

Carbaryl
Diazinon
Fenitrothion
Malathion
Parathion

California Methods

California Air Resources Board Method 1004 Carbonyl Compounds as DNPH derivatives by HPLC

M-1004 1 x 1 mL
At stated conc. in AcCN 13 comps.
M-1004-10X 1 x 1 mL
At 10 times the stated conc. in AcCN 13 comps.

Carbonyl Compound	DNPH Derivative
Acetaldehyde	3.0 µg/mL 15.3 µg/mL
Acetone	3.0 µg/mL 12.3 µg/mL
Acrolein	3.0 µg/mL 12.7 µg/mL
Benzaldehyde	3.0 µg/mL 8.1 µg/mL
2-Butanone (MEK)	3.0 µg/mL 10.5 µg/mL
n-Butyraldehyde	3.0 µg/mL 10.5 µg/mL
Crotonaldehyde	3.0 µg/mL 10.7 µg/mL
Formaldehyde	3.0 µg/mL 21.0 µg/mL
Hexanal	3.0 µg/mL 8.4 µg/mL
Methacrolein	3.0 µg/mL 10.7 µg/mL
Propionaldehyde	3.0 µg/mL 12.3 µg/mL
m-Tolualdehyde	3.0 µg/mL 7.5 µg/mL
Valeraldehyde	3.0 µg/mL 9.3 µg/mL

CAR-DNPH 1 x 1 mL
At stated conc. in AcCN as DNPH derivatives 7 comps.

Acetaldehyde-DNPH	1000 µg/mL	Butyraldehyde-DNPH	500 µg/mL
Acetone-DNPH	500 µg/mL	Formaldehyde-DNPH	1500 µg/mL
Acrolein-DNPH	500 µg/mL	Propionaldehyde-DNPH	500 µg/mL
Benzaldehyde-DNPH	500 µg/mL		

Reference Gas Oil Sample

RGS-001 1 x 1 mL
Hydrocarbon Mixture (boiling point range 250-850°F)

California Method 750-M Standard

BDE-CALEWS 1 x 1 mL
10 µg/mL each in Isooctane 13 comps.

2,2',4-Tribromodiphenyl ether (#17)
2,4,4'-Tribromodiphenyl ether (#28)
2,2',4,4'-Tetrabromodiphenyl ether (#47)
2,3',4,4'-Tetrabromodiphenyl ether (#66)
2,3',4',6-Tetrabromodiphenyl ether (#71)
2,2',4,4',5-Pentabromodiphenyl ether (#99)
2,2',4,4',6-Pentabromodiphenyl ether (#100)
2,2',3,4,4',5'-Hexabromodiphenyl ether (#138)
2,2',4,4',5,5'-Hexabromodiphenyl ether (#153)
2,2',4,4',5,6'-Hexabromodiphenyl ether (#154)
2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183)
2,2',3,3',4,4',5,5',6,6'-Decabromodiphenyl ether (#209)
2,2',6,6'-Tetrabromobisphenol A

Florida Methods PAH by HPLC

Z-014G-FL 1 x 1 mL
2.0 mg/mL each in CH₂Cl₂:Benzene 18 comps.

Acenaphthene	Dibenz[a,h]anthracene
Acenaphthylene	Fluoranthene
Anthracene	Fluorene
Benz[a]anthracene	Indeno[1,2,3-cd]pyrene
Benzo[a]pyrene	Naphthalene
Benzo[b]fluoranthene	Phenanthrene
Benzo[g,h,i]perylene	Pyrene
Benzo[k]fluoranthene	1-Methylnaphthalene
Chrysene	2-Methylnaphthalene

Performance Check Solution

M-610-QC-FL 1 x 1 mL
M-610-QC-FL-PAK SAVE 5 x 1 mL
At stated conc. in AcCN 18 comps.

Acenaphthene (0.1 mg/mL)	Dibenz[a,h]anthracene (0.01 mg/mL)
Acenaphthylene (0.1 mg/mL)	Fluoranthene (0.01 mg/mL)
Anthracene (0.1 mg/mL)	Fluorene (0.1 mg/mL)
Benz[a]anthracene (0.01 mg/mL)	Indeno[1,2,3-cd]pyrene (0.01 mg/mL)
Benzo[a]pyrene (0.01 mg/mL)	1-Methyl naphthalene (0.1 mg/mL)
Benzo[b]fluoranthene (0.01 mg/mL)	2-Methyl naphthalene (0.1 mg/mL)
Benzo[g,h,i]perylene (0.01 mg/mL)	Naphthalene (0.1 mg/mL)
Benzo[k]fluoranthene (0.005 mg/mL)	Phenanthrene (0.1 mg/mL)
Chrysene (0.01 mg/mL)	Pyrene (0.01 mg/mL)

Matrix Spiking Solution

M-610-MS 1 x 1 mL
M-610-MS-PAK SAVE 5 x 1 mL
At stated conc. in AcCN 6 comps.

Benz[a]pyrene (0.5 mg/mL)	2-Methylnaphthalene (5.0 mg/mL)
Chrysene (0.5 mg/mL)	Phenanthrene (0.5 mg/mL)
1-Methylnaphthalene (5.0 mg/mL)	Pyrene (0.5 mg/mL)

PAH Mix Additions

H-001S/002S-M-20X 1 x 1 mL
1.0 mg/mL each in MeOH 2 comps.
1-Methyl naphthalene 2-Methyl naphthalene

Polynuclear Aromatic Hydrocarbons (HPLC)

M-8310-FL 1 x 1 mL
M-8310-FL-PAK SAVE 5 x 1 mL
0.5 mg/mL each in AcCN 18 comps.
M-8310-FL-SET 18 x 1 mL

Acenaphthene	M-8310-FL-01
Acenaphthylene	M-8310-FL-02
Anthracene	M-8310-FL-03
Benzo[a]anthracene	M-8310-FL-04
Benzo[a]pyrene	M-8310-FL-05
Benzo[b]fluoranthene	M-8310-FL-06
Benzo[g,h,i]perylene	M-8310-FL-07
Benzo[k]fluoranthene	M-8310-FL-08
Chrysene	M-8310-FL-09
Dibenz[a,h]anthracene	M-8310-FL-10
Fluoranthene	M-8310-FL-11
Fluorene	M-8310-FL-12
Indeno[1,2,3-cd]pyrene	M-8310-FL-13
1-Methylnaphthalene	M-8310-FL-14
2-Methylnaphthalene	M-8310-FL-15
Naphthalene	M-8310-FL-16
Phenanthrene	M-8310-FL-17
Pyrene	M-8310-FL-18

Polynuclear Aromatic Hydrocarbons (HPLC)

M-8310-QC-ATI 1 x 1 mL
M-8310-QC-ATI-PAK SAVE 5 x 1 mL
At stated conc. in AcCN 18 comps.

Acenaphthene (1000 µg/mL)	Dibenz[a,h]anthracene (200 µg/mL)
Acenaphthylene (2000 µg/mL)	Fluoranthene (200 µg/mL)
Anthracene (100 µg/mL)	Fluorene (200 µg/mL)
Benz[a]anthracene (100 µg/mL)	Indeno[1,2,3-cd]pyrene (100 µg/mL)
Benzo[a]pyrene (100 µg/mL)	1-Methylnaphthalene (1000 µg/mL)
Benzo[b]fluoranthene (200 µg/mL)	2-Methylnaphthalene (1000 µg/mL)
Benzo[g,h,i]perylene (200 µg/mL)	Naphthalene (1000 µg/mL)
Benzo[k]fluoranthene (100 µg/mL)	Phenanthrene (100 µg/mL)
Chrysene (100 µg/mL)	Pyrene (100 µg/mL)

Minnesota Method 465-D

List of Volatiles

Liquids

M-502A-R

M-502A-R-PAK

0.2 mg/mL each in MeOH

SAVE

1 x 1 mL

5 x 1 mL

54 comps.

Benzene (01)
Bromobenzene (02)
Bromochloromethane (03)
Bromodichloromethane (04)
Bromoform (05)
n-Butylbenzene (07)
sec-Butylbenzene (08)
tert-Butylbenzene (09)
Carbon tetrachloride (10)
Chlorobenzene (11)
Chloroform (13)
2-Chlorotoluene (15)
4-Chlorotoluene (16)
Dibromochloromethane (17)
1,2-Dibromo-3-chloropropane (18)
1,2-Dibromoethane (19)
Dibromomethane (20)
1,2-Dichlorobenzene (21)
1,3-Dichlorobenzene (22)
1,4-Dichlorobenzene (23)
1,1-Dichloroethane (25)
1,2-Dichloroethane (26)
1,1-Dichloroethene (27)
cis-1,2-Dichloroethene (28)
trans-1,2-Dichloroethene (29)
1,2-Dichloropropane (30)
1,3-Dichloropropane (31)

2,2-Dichloropropane (32)
1,1-Dichloropropene (33)
cis-1,3-Dichloropropene (34A) *
trans-1,3-Dichloropropene (34B) **
Ethylbenzene (35)
Hexachlorobutadiene (36)
Isopropylbenzene (*Cumene*) (37)
p-Isopropyltoluene (*p*-*Cymene*) (38)
Methylene chloride (39)
Naphthalene (40)
n-Propylbenzene (41)
Styrene (42)
1,1,1,2-Tetrachloroethane (43)
1,1,2,2-Tetrachloroethane (44)
Tetrachloroethene (45)
Toluene (46)
1,2,3-Trichlorobenzene (47)
1,2,4-Trichlorobenzene (48)
1,1,1-Trichloroethane (49)
1,1,2-Trichloroethane (50)
Trichloroethene (51)
1,2,3-Trichloropropane (53)
1,2,4-Trimethylbenzene (54)
1,3,5-Trimethylbenzene (55)
o-Xylene (57)
m-Xylene (58) * *cis* (1.06 x conc.) (34A)
p-Xylene (59) ** *trans* (0.94 x conc.) (34B)

Gases

M-465B-10X

M-465B-10X-PAK

0.2 mg/mL each in MeOH

SAVE

1 x 1 mL

5 x 1 mL

7 comps.

Bromomethane
Chloroethane
Chloromethane
Dichlorodifluoromethane

Dichlorofluoromethane
Trichlorofluoromethane
Vinyl chloride

M-465D-ADD-R *

0.2 mg/mL each in MeOH

1 x 1 mL

8 comps.

Acetone
Allyl chloride
Ethyl ether
Methyl ethyl ketone

Methyl isobutyl ketone
Methyl-*t*-butyl ether
Tetrahydrofuran
Trichlorotrifluoroethane

* ColdPAK required to maintain integrity of product.

Method 465-D Volatiles Set

M-465D-SET

3 x 1 mL

(M-502A-R, M-465B-10X, M-465D-ADD-R)

M-465D-SET-PAK

SAVE

5 x (3 x 1 mL)

Pesticides & Herbicides

List 1 - Pesticide Standard

MDA-PEST-01-R1

MDA-PEST-01-R1-PAK

500 µg/mL each in CH₂Cl₂

SAVE

1 x 1 mL

5 x 1 mL

22 comps.

Acetochlor Dimethenamid
Alachlor Dursban
Atrazine Dyfonate
Atrazine-desisopropyl EPTC
Cyanazine Ethalfuralin
Desethyl atrazine Metolachlor

Metribuzin Propazine
Pendimethalin Simazine
Phorate Terbufos
Propachlor Triallate
Prometon Trifluralin

List 2 - Herbicide Acids Standards

MDA-HERB-01

At stated conc. in Acetone

1 x 1 mL

9 comps.

2,4-D (0.1 mg/mL)
2,4-DB (0.1 mg/mL)
2,4,5-T (0.1 mg/mL)
Silvex (0.1 mg/mL)
Bentazon (0.1 mg/mL)

Dicamba (0.1 mg/mL)
MCPA (10 mg/mL)
Picloram (0.1 mg/mL)
Triclopyr (0.1 mg/mL)

Technical Note

This expanded analyte list for Method 465-D contains all the analytes in one multi-component standard at a high concentration. This eliminates the need to combine more than one standard to cover the complete analyte list. The "Butylate" pesticide in conjunction with the MDA Method 465 formulation has all the required analytes for the Wisconsin DATCP pesticide program. Since many labs perform work in both Minnesota and Wisconsin, a single calibration curve can be used to monitor analytes covered by both methods.

Wisconsin DNR VOC Mixture

S-989

2.0 mg/mL each in MeOH

1 x 1 mL

52 comps.

Benzene
Bromobenzene
Bromodichloromethane
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
Carbon tetrachloride
Chlorobenzene
Chlorodibromomethane
Chloroethane
Chloroform
Chloromethane
2-Chlorotoluene
4-Chlorotoluene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
1,2-Dichlorobenzene
1,3-Dichlorobenzene

1,4-Dichlorobenzene
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
1,3-Dichloropropane
2,2-Dichloropropane
Diisopropyl ether
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene
p-Isopropyltoluene
Methylene chloride
Methyl *tert*-butyl ether

Naphthalene
n-Propylbenzene
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl chloride
o-Xylene
m-Xylene
p-Xylene



Biocides are used in all types of industries to control viruses, bacteria, fungi, insects and animals. The intended use and chemical potency of biocides require that their use, storage and disposal be controlled to prevent adverse effects to the public and/or environment. To ensure the safety of biocides, government regulations are in place to assess the active substances within commercial products.

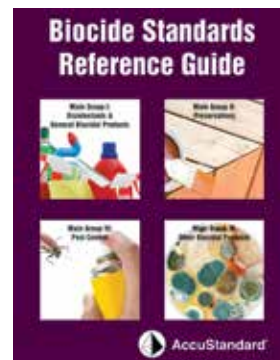


One such regulation is the Biological Products Directive 98/8/EC (BPD) which has been recently revised and is now designated as EU Biocides Regulation 528/2012 (EU BPR). Under this legislation, active compounds are submitted for approval on the list of Approved Active Substances. This regulation went into effect in September 2013, and classifies biocides into 22 biocide product types, grouped into four main areas.

MAIN GROUP I: Disinfectants and general biocidal products

Product-type

- 1: Human hygiene biocidal products
- 2: Private and public health areas disinfectants and other biocidal products
- 3: Veterinary hygiene biocidal products
- 4: Food and feed areas disinfectants
- 5: Drinking water disinfectants



Biocide Guide include chemical structures and physical data.

MAIN GROUP II: Preservatives

Product-type

- 6: In-can preservatives
- 7: Film preservatives
- 8: Wood preservatives
- 9: Fiber, leather, rubber and polymerized materials preservatives
- 10: Masonry preservatives
- 11: Preservatives for liquid-cooling and processing systems
- 12: Slimicides
- 13: Metalworking-fluid preservatives



MAIN GROUP III: Pest control

Product-type

- 14: Rodenticides
- 15: Avicides
- 16: Molluscicides
- 17: Piscicides
- 18: Insecticides, acaricides and products to control other arthropods
- 19: Repellents and attractants



MAIN GROUP IV: Other biocidal products

Product-type

- 20: Preservatives for food or feedstocks
- 21: Anti-fouling products
- 22: Embalming and taxidermist fluids
- 23: Control of other vertebrates

Biocide Standards

Compound	CAS No.	Group / Uses	Cat. No.	Unit
Abamectin	71751-41-2	III / 18	BIOC-236N-10MG	10 mg
Acetamidrid	135410-20-7	III / 18	BIOC-237N-10MG	10 mg
Allethrin	584-79-2	III / 18	BIOC-239N-10MG	10 mg
Ammonium bromide	1212-97-9	I, II / 2, 4, 6, 7, 9, 11, 12	BIOC-095N-10MG	10 mg
Ammonium sulfate	7783-20-2	II / 11, 12	BIOC-168N	100 mg
Azamethiphos	35575-96-3	III / 18	BIOC-215N-10MG	10 mg
Bendiocarb	22781-23-3	III / 18	BIOC-211N-10MG	10 mg
Benzalkonium chloride (Tech)	63449-41-2	I, II, III, IV / 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 17, 22	BIOC-052N	100 mg
Benzethonium chloride	121-54-0	I / 1	BIOC-018N-25MG	25 mg
1,2-Benzisothiazol-3(2H)-one	2634-33-5	I, II, IV / 2, 6, 7, 9, 10, 11, 12, 13, 22	BIOC-082S-W	1 mL
Benzoic acid	65-85-0	I, II, IV / 1, 2, 3, 4, 6, 11, 20	BIOC-006N-25MG	25 mg
Benzyl benzoate	120-51-4	I, III / 2, 18	BIOC-067N	100 mg
2-Benzyl-4-chlorophenol	120-32-1	I, II / 1, 2, 3, 4, 6	BIOC-017N	100 mg
Bifenthrin	82657-04-3	II, III / 8, 18	BIOC-161N-10MG	10 mg
2-Biphenylol sodium salt tetrahydrate	132-27-4	I, II / 1, 2, 3, 4, 6, 7, 9, 10, 13	BIOC-022N	100 mg
N,N'-Bis(hydroxymethyl)urea (MFG)	140-95-4	I, II / 2, 6, 9, 11, 12, 13	BIOC-074N	100 mg
Bis(trichloromethyl) sulphone	3064-70-8	II, IV / 6, 9, 10, 11, 12, 22	BIOC-128N-10MG	10 mg
Boric acid	10043-35-3	I, II, III, IV / 1, 2, 3, 6, 7, 8, 9, 10, 11, 12, 13, 18, 22	BIOC-044N-1G	1 gram
Brodifacoum	56073-10-0	III / 14	BIOC-180N-10MG	10 mg

Biocide Standards continued on next page



Biocides

Biocide Standards

Compound	CAS No.	Group / Uses	Cat. No.	Unit
Bromadiolone	28772-56-7	III / 14	BIOC-178N-10MG	10 mg
Bromoacetic acid	79-08-3	I / 4	BIOC-114N	100 mg
2-Bromo-2-(bromomethyl)pentanedinitrile	35691-65-7	II / 6, 7, 9, 10, 11, 13	BIOC-136N	100 mg
2-Bromo-2-nitropropane-1,3-diol	52-51-7	I, II, IV / 1, 2, 3, 4, 6, 7, 9, 10, 11, 12, 13, 22	BIOC-002N-25MG	25 mg
Busan (TCMTB)	21564-17-0	I, II / 2, 4, 6, 7, 9, 10, 11, 12, 13	BIOC-097S-CN	1 mL
			100 µg/mL in Acetonitrile	
Calcium hydroxide	1305-62-0	I / 2, 3	BIOC-078N	100 mg
Calcium hypochlorite	7778-54-3	I, II / 1, 2, 3, 4, 5, 11	BIOC-041N	100 mg
Calcium oxide	1305-78-8	I / 2, 3	BIOC-079N	100 mg
Calcium sorbate	7492-55-9	I, II, IV / 1, 3, 6, 7, 9, 20	BIOC-032N	100 mg
Captan	133-06-2	II / 6, 7, 9, 10	BIOC-122N-10MG	10 mg
Carbendazim	10605-21-7	II / 6, 7, 9, 10, 11, 12, 13	BIOC-133N-10MG	10 mg
Cetylpyridinium chloride	123-03-5	I, II, IV / 1, 2, 3, 4, 5, 6, 7, 9, 20	BIOC-020N	100 mg
Chloralose	15879-93-3	III, IV / 14, 15, 23	BIOC-177N-10MG	10 mg
Chloramine T trihydrate	7080-50-4	I, II / 1, 2, 3, 4, 5, 6, 9, 10, 11	BIOC-021N	100 mg
Chlorfenapyr	122453-73-0	II, III / 6, 7, 8, 9, 10, 12, 13, 18	BIOC-143N-10MG	10 mg
Chloroacetamide	79-07-2	I, II / 3, 6, 7, 9, 10, 11, 13	BIOC-109N	100 mg
4-Chloro-3,5-dimethylphenol	88-04-0	I, II / 1, 2, 3, 4, 5, 6	BIOC-012N-25MG	25 mg
4-Chloro-3-methylphenol	59-50-7	I, II / 1, 2, 3, 4, 6, 9, 10, 13	BIOC-003N-25MG	25 mg
Chlorophacinone	3691-35-8	III / 14	BIOC-175N-10MG	10 mg
Chlorothalonil	1897-45-6	II / 6, 7, 9, 10	BIOC-126N-10MG	10 mg
Chlorotoluron	15545-48-9	II / 6, 7, 9, 10, 11, 12, 13	BIOC-134N-10MG	10 mg
Cinnamal	104-55-2	I / 2	BIOC-062N	100 mg
Citric acid	77-92-9	I / 1, 2, 3	BIOC-010N-25MG	25 mg
Clothianidin	210880-92-5	I, II, III / 3, 8, 18	BIOC-112N-10MG	10 mg
Copper	7440-50-8	I, II, IV / 2, 4, 5, 11, 21	BIOC-089S	100 mL
			1000 µg/mL in tr. Nitric acid	
Copper (II) carbonate basic	12069-69-1	II / 8	BIOC-154N	100 mg
Copper dihydroxide	20427-59-2	II / 8	BIOC-155N	100 mg
Copper (I) oxide	1317-39-1	IV / 21	BIOC-151N	100 mg
Copper (II) oxide	1317-38-0	II / 8	BIOC-203N	100 mg
Copper (II) sulfate	7758-98-7	I / 1, 2, 4	BIOC-039N-1G	1 gram
Copper thiocyanate	1111-67-7	III, IV / 19, 21	BIOC-202N	100 mg
Coumatetralyl	5836-29-3	III / 14	BIOC-176N-10MG	10 mg
Creosote from beechwood tar	8021-39-4	II / 8	BIOC-153N	100 mg
m-Cresol	108-39-4	I / 2, 3	BIOC-064N	100 mg
Cyanamide	420-04-2	I, III / 3, 18	BIOC-110N	100 mg
N-Cyclopropyl-1,3,5-triazine-2,4,6-triamine	66215-27-8	III / 18	BIOC-221N-10MG	10 mg
Cyfluthrin	68359-37-5	III / 18	BIOC-222N-10MG	10 mg
L-Cyhalothrin	91465-08-6	III / 18	BIOC-227N-10MG	10 mg
a-Cypermethrin	67375-30-8	II, III / 6, 9, 18	BIOC-142N-10MG	10 mg
Cypermethrin	52315-07-8	II, III / 8, 9, 18	BIOC-156N-10MG	10 mg
Cyphenothrin	39515-40-7	III / 18	BIOC-216N-10MG	10 mg
Cyproconazole	94361-06-5	II / 8	BIOC-162S	1 mL
			100 µg/mL in Methanol	
Dazomet	533-74-4	I, II / 6, 7, 8, 9, 10, 11, 12	BIOC-125N-10MG	10 mg
Decanoic acid	334-48-5	I, III / 4, 18, 19	BIOC-116N *	100 mg
Deltamethrin	52918-63-5	III / 18	BIOC-218N-10MG	10 mg
Diazinon	333-41-5	III / 18	BIOC-201N-10MG	10 mg
Diazolidinyl urea	78491-02-8	II / 6, 7	BIOC-140N	100 mg
Diboron trioxide	1303-86-2	II / 8	BIOC-150N	100 mg
2,2-Dibromo-2-cyanoacetamide	10222-01-2	I, II / 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13	BIOC-046N	100 mg
1,3-Dibromo-5,5-dimethylhydantoin	77-48-5	I, II / 2, 11, 12	BIOC-057N	100 mg
Dichlofluanid	1085-98-9	II, IV / 7, 8, 10, 21	BIOC-146N-10MG	10 mg
2,4-Dichlorobenzyl alcohol	1777-82-8	I, II / 2, 6, 7, 9, 10, 12, 13	BIOC-081N	100 mg
1,3-Dichloro-5,5-dimethylhydantoin	118-52-5	I, II / 2, 11, 12	BIOC-066N-1G	1 gram
Dichlorophen	97-23-4	I, II / 2, 3, 4, 6, 7, 9, 10, 11, 12, 13	BIOC-061N-10MG	10 mg
Dichlorvos	62-73-7	III / 18	BIOC-185N-10MG	10 mg
Didecyldimethylammonium chloride	7173-51-5	I, II / 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13	BIOC-030N-10MG	10 mg
1,3-Didecyl-2-methyl-1H-imidazolium chloride	70862-65-6	I, II / 2, 3, 4, 6, 7, 10, 11, 12, 13	BIOC-103N	100 mg
N,N-Diethyl-m-toluamide (DEET, OFF)	134-62-3	III, IV / 19, 22	BIOC-196N-10MG	10 mg
Difenacoum	56073-07-5	III / 14	BIOC-179S-D	1 mL
			100 µg/mL in Dichloromethane	
Diffubenzuron	35367-38-5	III / 18	BIOC-214N-10MG	10 mg
Dimethyloctadecyl[3-(trimethoxysilyl)propyl ammonium chloride]	27668-52-6	I, II / 2, 7, 9, 10	BIOC-098N	100 mg
4,4-Dimethyloxazolidine	51200-87-4	II / 6, 11, 12, 13	BIOC-137N-10MG	10 mg
Diphenoxarsin-10-yl oxide	58-36-6	II / 9	BIOC-163N	100 mg
Dipotassium disulfite	16731-55-8	I, II, IV / 1, 2, 4, 5, 6, 9, 11, 12, 13, 20, 22	BIOC-047N-1G	1 gram
Diuron (Karmex)	330-54-1	II / 6, 7, 10	BIOC-124N-10MG	10 mg
Disilver oxide	20667-12-3	II / 11	BIOC-169N	100 mg
2,2'-Dithiobis(pyridine-N-oxide)	3696-28-4	II / 9	BIOC-165N-10MG	10 mg
Empenthrin	54406-48-3	III / 18	BIOC-219N-10MG	10 mg
Esfenvalerate	66230-04-4	III / 18	BIOC-235N-10MG	10 mg
Ethanol	64-17-5	I / 1, 2, 3, 4	BIOC-004N-25MG	25 mg
5-Ethyl-1-aza-3,7-dioxabicyclo[3,3,0]octane	7747-35-5	II / 6, 11, 12, 13	BIOC-132N	100 mg



Biocide Standards

Compound	CAS No.	Group / Uses	Cat. No.	Unit
Ethyl butylacetylaminopropionate	52304-36-6	III / 18	BIOC-217S 100 µg/mL in Methanol	1 mL
Ethylene oxide	75-21-8	I, IV / 2, 20	BIOC-056S-TP 5 mg/mL in Isooctane	1 mL
Etofenprox	80844-07-1	I, II, III / 2, 3, 8, 18	BIOC-106N-10MG	10 mg
Fenitrothion	122-14-5	III / 18	BIOC-191S 100 µg/mL in Methanol	1 mL
Fenoxycarb	72490-01-8	II / 8	BIOC-157N-10MG	10 mg
Fenpropimorph	67564-91-4	II / 6, 7, 8, 9, 10, 12, 13	BIOC-139N-10MG	10 mg
Fipronil	120068-37-3	III / 18	BIOC-229N-10MG	10 mg
Flocoumafen	90035-08-8	III / 14	BIOC-181S 100 µg/mL in Methanol	1 mL
Flufenoxuron	101463-69-8	II, III / 8, 18	BIOC-158N-10MG	10 mg
Fluometuron	2164-17-2	II / 6, 7, 9, 10, 11, 12, 13	BIOC-127N-10MG	10 mg
Folpet	133-07-3	II / 6, 7, 9, 10	BIOC-123N-10MG	10 mg
Formic acid	64-18-6	I, II / 1, 2, 3, 4, 5, 6, 9, 11, 12, 13	BIOC-005N-25MG	25 mg
Geraniol	106-24-1	III / 18, 19	BIOC-188N	100 mg
Gluteraldehyde	111-30-8	I, II, IV / 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 22	BIOC-016S-W 50% wt. in Water	1 mL
Glycolic acid	79-14-1	I, II / 2, 3, 4, 12	BIOC-058N	100 mg
Guazatine acetate (Tech)	115044-19-4	I / 2	BIOC-108N-10MG	10 mg
Hexaflumuron	86479-06-3	III / 18	BIOC-224N-10MG	10 mg
Hexahydro-1,3,5-tris(hydroxyethyl)triazine	4719-04-4	I, II / 2, 3, 4, 6, 9, 11, 12, 13	BIOC-086N	100 mg
Hydramethylnon	67485-29-4	III / 18	BIOC-226S 100 µg/mL in Methanol	1 mL
2-Hydroxy-4-isopropyl-2,4,6-cycloheptatrien-1-one	499-44-5	II / 10	BIOC-167N	100 mg
Icaridin	119515-38-7	III / 19	BIOC-228S-CN 100 µg/mL in Acetonitrile	1 mL
Imazalil	35554-44-0	I, II, IV / 2, 3, 4, 13, 20	BIOC-099N-10MG	10 mg
Imidacloprid	138261-41-3	III / 18	BIOC-230N-10MG	10 mg
Imiprothrin	72963-72-5	III / 18	BIOC-231S-CN 100 µg/mL in Acetonitrile	1 mL
Iodine	7553-56-2	I, II, IV / 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 22	BIOC-033N	100 mg
3-Iodo-2-propynyl butylcarbamate	5546-53-6	II / 6, 7, 8, 9, 10, 11, 13	BIOC-138N	100 mg
Irgarol	28159-98-0	II / 7, 9, 10	BIOC-148N-10MG	10 mg
Isopropanol	67-63-0	I, II / 1, 2, 3, 4, 5, 6, 9, 10, 11, 12	BIOC-007N-25MG	25 mg
Isoproturon	34123-59-6	II / 6, 7, 9, 10, 11, 12, 13	BIOC-135N-10MG	10 mg
L-(+)-Lactic acid	79-33-4	I, II, IV / 2, 3, 4, 6, 20	BIOC-059N-50MG	50 mg
Lauric acid	143-07-7	III / 19	BIOC-199N	100 mg
Lauryl dimethylamine oxide	70592-80-2	I / 1, 2	BIOC-053N	100 mg
Lignin (Alkaline)	9005-53-2	I, II / 1, 2, 3, 4, 6, 7, 9, 10, 11, 12, 13	BIOC-043N-1G	1 gram
Linalool	78-70-6	III / 19	BIOC-186N	100 mg
Magnesium bis(monoperoxyphthalate) hexahydrate	84665-66-7	I / 2, 3, 4	BIOC-104N	100 mg
Margosa extract	84696-25-3	III / 18, 19	BIOC-223N	100 mg
(R)-p-Mentha-1,8-diene	5989-27-5	II / 12	BIOC-170N	100 mg
(+)-cis-p-Menthane-3,8-diol	42822-86-6	I, III / 1, 2, 19	BIOC-050S-CN 100 µg/mL in Acetonitrile	1 mL
2-Mercaptobenzothiazole	149-30-4	I, II / 2, 7, 9, 11, 12, 13	BIOC-077N-10MG	10 mg
Metam-sodium dihydrate	6734-80-1	I, II, IV / 2, 4, 6, 9, 11, 12, 13, 20	BIOC-073N-10MG	10 mg
S-Methoprene	65733-16-6	III / 18	BIOC-234S 100 µg/mL in Methanol	1 mL
Methyl anthranilate	134-20-3	III / 19	BIOC-195N	100 mg
N,N'-Methylenebismorpholine	5625-90-1	II / 6, 9, 11, 13	BIOC-129S 100 µg/mL in Methanol	1 mL
Methylene dithiocyanate	6317-18-6	II, IV / 6, 7, 9, 10, 11, 12, 13, 22	BIOC-130N	100 mg
2-Methyl-2H-isothiazol-3-one	2682-20-4	I, II, IV / 2, 4, 6, 7, 9, 10, 11, 12, 13, 22	BIOC-083N-10MG	10 mg
Monolinuron	1746-81-2	I / 2	BIOC-080N-10MG	10 mg
Myristyltrimethylammonium bromide	1119-97-7	I / 1	BIOC-024N	100 mg
Nabam	142-59-6	I, II / 2, 4, 6, 9, 10, 11, 12, 13	BIOC-075N-10MG	10 mg
Naled	300-76-5	III / 18	BIOC-200N-10MG	10 mg
Naphthalene	91-20-3	III / 19	BIOC-187N	100 mg
Nonanoic acid	112-05-0	I, II, III / 2, 10, 19	BIOC-065N	100 mg
Octanoic acid	124-07-2	I, III / 4, 18	BIOC-115N	100 mg
Oct-1-ene-3-ol	3391-86-4	III / 19	BIOC-205N	100 mg
2-Octyl-2H-isothiazol-3-one	26530-20-1	I, II / 4, 6, 7, 9, 10, 11, 12, 13	BIOC-119N-10MG	10 mg
Orthophosphoric acid	7664-38-2	I / 4	BIOC-117N-1G	1 gram
Oxazolidine	121776-33-8	I, II / 2, 6, 10, 11, 12, 13	BIOC-102S 100 µg/mL in Methanol	1 mL
Peracetic acid	79-21-0	I, II / 1, 2, 3, 4, 5, 6, 11, 12	BIOC-011N	100 mg
Permethrin	52645-53-1	I, II, III, IV / 2, 3, 5, 8, 9, 18, 22	BIOC-100N-10MG	10 mg
2-Phenoxyethanol	122-99-6	I, II / 1, 2, 3, 4, 6, 7, 10, 11, 13	BIOC-019N-25MG	25 mg
o-Phenylphenol	90-43-7	I, II / 1, 2, 3, 4, 6, 7, 9, 10, 13	BIOC-013N-25MG	25 mg
Piperonyl butoxide	51-03-6	III / 18, 19	BIOC-184N-10MG	10 mg
Poly(vinylpyrrolidone) Iodine complex	25655-41-8	I, II, III, IV / 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 22	BIOC-055N	100 mg
Potassium dimethyl dithiocarbamate	128-03-0	I, II / 2, 4, 6, 9, 10, 11, 12, 13	BIOC-069N-50MG	50 mg

Biocide Standards continued on next page



Biocides

Biocide Standards

Compound	CAS No.	Group / Uses	Cat. No.	Unit
Potassium monopersulfate triple salt	70693-62-8	I, II / 1, 2, 3, 4, 5, 11, 12	BIOC-054N-1G	1 gram
Potassium permanganate	7722-64-7	I / 5	BIOC-121N	100 mg
Potassium sorbate	24634-61-5	I, II / 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	BIOC-049N	100 mg
Potassium sulfite	10117-38-1	I, II, IV / 1, 2, 4, 5, 6, 9, 11, 12, 13, 20, 22	BIOC-045N	100 mg
Prallethrin	23031-36-9	III / 18	BIOC-212S	1 mL
			100 µg/mL in Methanol	
Prometryne	7287-19-6	II / 6, 7, 9, 10, 11, 12, 13	BIOC-131N-10MG	10 mg
1-Propanol	71-23-8	I / 1, 2, 3, 4	BIOC-009N-25MG	25 mg
Propiconazole	60207-90-1	I, II, IV / 1, 2, 4, 7, 8, 9, 10, 12, 13, 20	BIOC-051N-10MG	10 mg
Propoxur	114-26-1	III / 18	BIOC-190N-10MG	10 mg
Pyrethrins (Tech Mix)	8003-34-7	III / 18, 19	BIOC-209N-10MG	10 mg
Pyridine-2-thiol-1-oxide, sodium salt	3811-73-2	I, II / 2, 3, 4, 6, 7, 9, 10, 11, 12, 13	BIOC-085N-10MG	10 mg
Pyriproxyfen	95737-68-1	III / 18	BIOC-232N-10MG	10 mg
Quaternium-15	51229-78-8	II / 6, 9, 12, 13	BIOC-141N	100 mg
Rotenone	83-79-4	III / 17	BIOC-183N-10MG	10 mg
Salicylic acid	69-72-7	I, II / 1, 2, 3, 4, 6	BIOC-008N-25MG	25 mg
Silicic acid	61790-53-2	III / 18	BIOC-233N	100 mg
Silicon dioxide	7631-86-9	I, III, IV / 3, 18, 20	BIOC-111N	100 mg
Silver	7440-22-4	I, II / 2, 4, 5, 9, 11	BIOC-088S	100 mL
			1000 µg/mL in tr. Nitric acid in H ₂ O	
Silver chloride	7783-90-6	I, II / 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 13	BIOC-042N	100 mg
Silver nitrate	7761-88-8	I / 1	BIOC-040N	100 mg
Sodium benzoate	532-32-1	I, II, IV / 1, 2, 6, 11, 20	BIOC-023N	100 mg
Sodium bisulfite	7631-90-5	I, II, IV / 1, 2, 4, 5, 6, 9, 11, 12, 13, 20, 22	BIOC-034N-1G	1 gram
Sodium bromide	7647-15-6	I, II / 2, 4, 6, 7, 9, 11, 12, 13	BIOC-091N	100 mg
Sodium chlorate	7775-09-9	I, II / 2, 5, 11, 12	BIOC-093N	100 mg
Sodium chloride	7647-14-5	I / 5	BIOC-120N	100 mg
Sodium chlorite	7758-19-2	I, II, IV / 2, 3, 4, 5, 11, 12, 20	BIOC-092N	100 mg
Sodium dichloroisocyanurate dihydrate	51580-86-0	I, II / 1, 2, 3, 4, 5, 6, 9, 11, 12	BIOC-028N	100 mg
Sodium dimethylarsinate	124-65-2	III / 18	BIOC-194N-10MG	10 mg
Sodium dimethyldithiocarbamate hydrate	207233-95-2	I, II / 2, 3, 4, 5, 6, 9, 10, 11, 12, 13	BIOC-070N	100 mg
Sodium lignosulfonate (Tech)	8061-51-6	II / 12	BIOC-171N	100 mg
Sodium metabisulfite	7681-57-4	I, II, IV / 1, 2, 4, 5, 6, 9, 11, 12, 13, 20, 22	BIOC-036N-1G	1 gram
Sodium persulfate	7775-27-1	I / 4	BIOC-118N	100 mg
Sodium sulphite	7757-83-7	I, II, IV / 1, 2, 4, 5, 6, 9, 11, 12, 13, 20, 22	BIOC-038N-1G	1 gram
Sodium tetraborate	1330-43-4	I, II / 1, 2, 7, 8, 9, 10, 11, 13	BIOC-025N	100 mg
Sorbic acid	110-44-1	I, II / 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	BIOC-015N	100 mg
Spinosad (Tech)	168316-95-8	I, III / 3, 18	BIOC-113N-10MG	10 mg
Sumithrin	26002-80-2	III / 18	BIOC-238N-10MG	10 mg
Symclosene	87-90-1	I, II / 2, 3, 4, 5, 6, 7, 9, 11, 12	BIOC-060N	100 mg
Tebuconazol	107534-96-3	II / 7, 8, 9, 10	BIOC-149N-10MG	10 mg
Terbutylazine	5915-41-3	I, II / 2, 11, 12	BIOC-087N-10MG	10 mg
Terbutryn	886-50-0	II / 7, 9, 10	BIOC-145N-10MG	10 mg
Tetramethrin	7696-12-0	III / 18	BIOC-207N-10MG	10 mg
Thiabendazole	148-79-8	I, II, IV / 2, 6, 7, 8, 9, 10, 11, 12, 13, 20	BIOC-076N-10MG	10 mg
Thiamethoxam	153719-23-4	II, III / 8, 9, 18	BIOC-159N-10MG	10 mg
Thiram	137-26-8	I, II / 2, 6, 7, 9, 10, 11, 12	BIOC-071N	100 mg
THPS (Tech Grade)	55566-30-8	I, II / 2, 6, 9, 11, 12	BIOC-101N	100 mg
Tolnaftate	2398-96-1	II / 9	BIOC-164N-25MG	25 mg
Tolylfluamide	731-27-1	II, IV / 7, 8, 10, 21	BIOC-144N-10MG	10 mg
Transfluthrin	118712-89-3	III / 18	BIOC-225N-10MG	10 mg
Tributyltetradecylphosphonium chloride	81741-28-8	I, II / 2, 4, 9, 11, 12	BIOC-105N	100 mg
2,4,6-Trichlorophenol sodium salt	3784-03-0	I, II / 2, 3, 6, 9	BIOC-084N	100 mg
Triclocarban	101-20-2	I / 1, 2, 4	BIOC-014N-25MG	25 mg
Triclosan	3380-34-5	I, II / 1, 2, 3, 7, 9	BIOC-029N	100 mg
cis-Tricos-9-ene	27519-02-4	III / 18, 19	BIOC-213N	100 mg
Triflumuron	64628-44-0	III / 18	BIOC-220N-10MG	10 mg
Tris(hydroxymethyl)nitromethane	126-11-4	I, II / 2, 3, 6, 11, 12, 13	BIOC-068N	100 mg
Undecan-2-one (Methyl-nonyl-ketone)	112-12-9	III / 19	BIOC-189S-CN	1 mL
			100 µg/mL in Acetonitrile	
Warfarin	81-81-2	III / 14	BIOC-172N-10MG	10 mg
Warfarin sodium	129-06-6	III / 14	BIOC-174N	100 mg
Zinc borate (Tech)	12767-90-7	II / 9	BIOC-166N	100 mg
Zinc pyriithione	13463-41-7	I, II, IV / 2, 6, 7, 9, 10, 13, 21	BIOC-096N	100 mg
Zinc sulfide	1314-98-3	II / 7, 9, 10	BIOC-147N	100 mg
Zineb	12122-67-7	IV / 21	BIOC-210N-10MG	10 mg
Ziram	13730-4	I, II / 2, 6, 7, 9, 10, 11, 12	BIOC-072N-10MG	10 mg

Methods Other Than EPA

Halobenzoquinone, Nonylphenol and Octylphenol Ethoxylates

Halobenzoquinones (disinfectant by-products)

Halobenzoquinones (HBQs) are disinfection by-products formed by reactions between disinfectants and organic matter in water. HBQs likely exhibit carcinogenic properties due to their structural similarities with benzoquinone and related compounds.

Halobenzoquinones

Compound	CAS	All in 10 µg/mL in AcCN 	
		Cat. No.	1 mL
2,3-Dibromo-5,6-dimethyl-1,4-benzoquinone	38969-08-3	HBQ-001S	
2,6-Dichloro-1,4-benzoquinone	697-91-6	HBQ-002S	
2,5-Dibromo-(1,4)benzoquinone	1633-14-3	HBQ-003S	
2,3,5,6-Tetrabromo-(1,4)benzoquinone	488-48-2	HBQ-004S	
3,4,5,6-Tetrabromo-(1,2)benzoquinone	2435-54-3	HBQ-005S	
2,6-Dibromo-3,5-dimethyl-1,4-benzoquinone	87405-27-4	HBQ-006S	
2,6-Dibromo-3-chloro-5-methyl-(1,4)benzoquinone		HBQ-007S	



Nonylphenols (NPs) have been known to disrupt endocrine function and sexual development in aquatic organisms. Environmental exposure occurs from breakdown products of the industrially important alkylphenol (poly)ethoxylates (APEs). Due to the outstanding surfactant properties of APEs they have been produced from NP in large quantities and used in detergents and cleaning products as well as emulsifiers in paints, pesticides, and textiles. Ninety percent of the APEs produced are nonylphenol ethoxylates (NPEs). Octylphenol ethoxylates are less commonly used.

The US EPA is working collaboratively with ASTM to develop and validate an analytical method for NPs and APEs. Under its plan, the US EPA will add nonylphenols (NPs) and nonylphenol ethoxylates (NPEs) to the Toxic Release Inventory thus requiring companies to report their discharge of the substances into water, air, or land. Some U.S. corporations have recognized the dangers of NPEs and voluntarily eliminated NPEs in their products.

The European Union and Canada have already banned the use of NPEs in detergents. According to the European Union's Directive 76/769/EEC, the use of these compounds is restricted.

ASTM D7065-06 4-tert-Octylphenol, 4-Nonylphenol and their Tech Equivalents, Mono and Multi-Ethoxylates

Nonylphenol Calibration Standard Solution

M-1626		1 x 1 mL
At stated conc. in CH ₂ Cl ₂		7 comps.
Nonylphenol	(160 µg/mL)	
Nonylphenol monoethoxylate	(320 µg/mL)	
Nonylphenol diethoxylate	(640 µg/mL)	
4-tert-Octylphenol	(32 µg/mL)	
Bisphenol A (BPA)	(32 µg/mL)	
4-Nonylphenol	(32 µg/mL)	
4-Nonylphenol monoethoxylate	(32 µg/mL)	

Nonylphenol Internal Standard

M-1626-IS		1 x 1 mL
2000 µg/mL each in CH ₂ Cl ₂		2 comps.
Acenaphthene-d ₁₀	Phenanthrene-d ₁₀	

Nonylphenol Target Component Spike Standard

M-1626-S		1 x 1 mL
At stated conc. in MeOH		5 comps.
Nonylphenol	(160 µg/mL)	
Nonylphenol monoethoxylate	(320 µg/mL)	
Nonylphenol diethoxylate	(640 µg/mL)	
4-tert-Octylphenol	(32 µg/mL)	
Bisphenol A	(32 µg/mL)	

Nonylphenol Surrogate Component Spike Standard

M-1626-SS		1 x 1 mL
32 µg/mL each in MeOH		2 comps.
4-Nonylphenol	4-Nonylphenol monoethoxylate	

M-1626-01S		1 x 1 mL
1000 µg/mL in MeOH		
Bisphenol A (BPA)		

ASTM D7485

Nonylphenols in Environmental Water Set

D-7485-SET		5 x 1 mL
2500 µg/mL each in AcCN:MeOH(90:10), * except (50:50)		7 comps.
Nonylphenol	D-7485-1 *	1 mL
Nonylphenol monoethoxylate	D-7485-2	1 mL
Nonylphenol diethoxylate	D-7485-3	1 mL
Octylphenol	D-7485-4	1 mL
2-Bromo-4-(1,1,3,3-tetramethylbutyl)phenol	D-7485-09-SS	1 mL

Storage Refrig (0-5°C)

Alkyl-Phenol-Metabolites

Compound	CAS No.	100 µg/mL in MeOH
Tech Grades		Cat. No. 1 mL
Nonylphenol (tech)	84852-15-3	PEO-002S
Nonylphenol monoethoxylate (tech)	68412-54-4	PEO-005S
Nonylphenol diethoxylate (tech)		PEO-006S
Nonylphenol triethoxylate (tech)		PEO-008S
Nonylphenoxy acetic acid (tech)	3115-49-9	PEO-009S
Nonylphenoxyethoxyacetic acid (tech)		PEO-012S
4-n-Nonylphenol	104-40-5	PEO-004S
4-n-Nonylphenol monoethoxylate	104-35-8	PEO-007S
4-n-Nonylphenol diethoxylate	20427-84-3	PEO-014S
4-tert-Octylphenol	140-66-9	PEO-003S
4-tert-Octylphenol monoethoxylate		PEO-010S
4-tert-Octylphenol diethoxylate		PEO-011S
4-tert-Octylphenol triethoxylate		PEO-013S
4-n-Octylphenol	1806-26-4	PEO-001S
4-n-Octylphenol monoethoxylate	51437-89-9	PEO-016S
4-n-Octylphenol diethoxylate	51437-90-2	PEO-017S
4-n-Octylphenol triethoxylate		PEO-018S
2-Bromo-4-tert-octylphenol (Internal Standard)		PEO-015S-IS



Methods Other Than EPA

USP 467 VOCs, F-List Hazardous Waste

Method USP 467 VOCs from Stack Gas Effluents

USP/National Formulary VOC Mixtures

NF-467
NF-467-PAK
At stated conc. in MeOH

SAVE

1 x 1 mL
5 x 1 mL
5 comps.

Benzene (200 µg/mL)
Chloroform (100 µg/mL)
1,4-Dioxane (200 µg/mL)

Methylene chloride (200 µg/mL)
Trichloroethene (200 µg/mL)

NF-467-R4
NF-467-R4-PAK
At stated conc. in Dimethyl sulfoxide

SAVE

1 x 1 mL
5 x 1 mL
5 comps.

Benzene (2 µg/mL)
Chloroform (60 µg/mL)
p-Dioxane (380 µg/mL)

Dichloromethane (600 µg/mL)
Trichloroethene (80 µg/mL)

NF-467-R
NF-467-R-PAK
At stated conc. in DMSO

SAVE

1 x 1 mL
5 x 1 mL
6 comps.

Benzene (200 µg/mL)
Chloroform (100 µg/mL)
1,4-Dioxane (200 µg/mL)

Ethylene oxide (20 µg/mL)
Methylene chloride (200 µg/mL)
Trichloroethene (200 µg/mL)

NF-467-R6
NF-467-R6-PAK
At stated conc. in Dimethyl sulfoxide

SAVE

1 x 1 mL
5 x 1 mL
5 comps.

Benzene (100 µg/mL)
Chloroform (50 µg/mL)
p-Dioxane (100 µg/mL)

Dichloromethane (500 µg/mL)
Trichloroethene (100 µg/mL)

NF-467-R3
NF-467-R3-PAK
At stated conc. in MeOH

SAVE

1 x 1 mL
5 x 1 mL
5 comps.

Benzene (2 µg/mL)
Chloroform (60 µg/mL)
p-Dioxane (380 µg/mL)

Dichloromethane (600 µg/mL)
Trichloroethene (80 µg/mL)

F-List Hazardous Waste from Non-Specific Sources

F001 & F002 Solvent List Components

FL-0102
2.0 mg/mL each in MeOH

1 x 1 mL
10 comps.

Carbon tetrachloride
Chlorobenzene
1,2-Dichlorobenzene
Methylene chloride
Tetrachloroethene

1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
1,1,2-Trichloro-1,2,2-trifluoroethane
Trichlorofluoromethane

F003 List Components (excluding MeOH as analyte)

FL-0003
2.0 mg/mL in MeOH

1 x 1 mL
10 comps.

Acetone
n-Butanol
Cyclohexanone
Ethyl acetate
Ethylbenzene

Ethyl ether
Methyl isobutyl ketone
m-Xylene
o-Xylene
p-Xylene

Additional Alcohol Solvents

FL-OADD
2.0 mg/mL each in H₂O

1 x 1 mL
3 comps.

Ethanol
Isopropanol

Methanol

F004 List Component Mixes

FL-0004-CR
2.0 mg/mL in MeOH

1 x 1 mL
3 comps.

m-Cresol
o-Cresol

p-Cresol

FL-0004-CA
2.0 mg/mL in MeOH

1 x 1 mL

Cresylic acid (technical mixture of phenol, cresols & xylenes)

F005 List Components (includes Nitrobenzene)

FL-0005-NB
2.0 mg/mL each in MeOH

1 x 1 mL
9 comps.

Benzene
Carbon disulfide
2-Ethoxyethanol
Isobutanol
Methyl ethyl ketone

Nitrobenzene
2-Nitropropane
Pyridine
Toluene



Organic Technical Reference

Solvent Miscibility Table, Density and Boiling Point

Acetic acid (1.049 g/mL) (117-118°C)
Acetone (0.791 g/mL) (56°C)
Acetonitrile (AcCN) (0.786 g/mL) (81-82°C)
Benzene (0.874 g/mL) (80°C)
2-Butanol (0.808 g/mL) (98°C)
Butyl alcohol (0.81 g/mL) (116-118°C)
tert-Butylmethyl ether (MtBE) (0.74 g/mL) (55-56°C)
Carbon tetrachloride (1.594 g/mL) (76-77°C)
Chloroform (1.492 g/mL) (60.5-61.5°C)
Cyclohexane (0.779 g/mL) (80.7°C)
Cyclopentane (0.751 g/mL) (50°C)
Dichloroethane (1.256 g/mL) (83°C)
N,N-Dimethylformamide (DMF) (0.944 g/mL) (153°C)
1,4-Dioxane (1.034 g/mL) (100-102°C)
Dipropyl ether (0.736 g/mL) (88-90°C)
Ethyl acetate (EtOAc) (0.902 g/mL) (76.5-77.5°C)
Ethyl alcohol (EtOH) (0.789 g/mL) (78°C)
Ethyl ether (0.706 g/mL) (34.6°C)
n-Heptane (0.684 g/mL) (98°C)
n-Hexane (0.659 g/mL) (69°C)
Isooctane (0.692 g/mL) (98-99°C)
Isopropyl alcohol (0.785 g/mL) (82°C)
Methanol (MeOH) (0.791 g/mL) (64.7°C)
Methylene chloride (CH ₂ Cl ₂) (1.325 g/mL) (39.8-40°C)
Methyl sulfoxide (DMSO) (1.10 g/mL) (189°C)
n-Pentane (0.626 g/mL) (35-36°C)
1,1,2,2-Tetrachloroethane (1.586 g/mL) (147°C)
Tetrahydrofuran (THF) (0.889 g/mL) (65-67°C)
Toluene (0.865 g/mL) (110-111°C)
Trichloroethane (1.336 g/mL) (74-76°C)
Water (1 g/mL) (100°C)
Xylene (0.868 g/mL) (138-139°C)

☐ Miscible
☒ Immiscible

Read down column
and across for solvent
miscibility

Density@25°C
Boiling Point

Abbreviations

AA	Atomic Absorption	ICP	Inductively Coupled Plasma
ACS	American Chemical Society	IR	Infrared
ANSI	American National Standards Institute	KF	Karl Fischer
AOAC	Association of Official Analytical Chemists	meq	Milliequivalent
APHA	American Public Health Association	NF	National Formulary
ASTM	American Society for Testing Materials	NIST	National Institute of Standards and Technology
BSI	British Standards Institute	OSHA	Occupational Safety and Health Administration
CAS	Chemical Abstracts Service	RFA	Renewable Fuel Association
CI	Color Index	SPE	Solid Phase Extraction
EPA	U.S. Environmental Protection Agency	TLC	Thin Layer Chromatography
GLC	Gas Liquid Chromatography	USDA	U.S. Department of Agriculture
GR	Guaranteed Reagent	USP	U.S. Pharmacopoeia

Instrumentation for Analysis

GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectroscopy
GC/FID	Gas Chromatography/Flame Ionization Detector
GC/PID	Gas Chromatography/Photoionization Detector
GC/ECD	Gas Chromatography/Electron Capture Detector
GC/ELCD	Gas Chromatography/Electrolytic Conductivity Detector
GC/NPD	Gas Chromatography/Nitrogen Phosphorus Detector
HPLC	High Performance Liquid Chromatography
NPD/TEA	Nitrogen-Phosphorus Detector/Thermal Energy Analyzer with the reductive Hall detector
TCD/FID	Thermal Conductivity Detector/Flame Ionization Detector
NPD/AFD/TSD	Nitrogen-Phosphorus Detector/Alkali-Flame Detector/Thermionic Specific Detector
NPA/ELCD/FPD	Nitrogen-Phosphorus Detector/Electrolytic Conductivity Detector/Flame Photometric Detector
HRGC/LRMS	High Resolution Gas Chromatography/Low Resolution Mass Spectrometry
FTIR	Fourier Transform Infrared

General Constants

Universal Gas Constant	R = 0.0821 (Atm)(L)/(K)(mole)
Acceleration Due to Gravity	g = 32.17 ft/sec ² , 9.8 m/sec ²
Avogadro's Constant	N = 6.023 x 10 ²³ molecules/mole
Speed of Light	c = 186,282 miles/sec, 3 x 10 ¹⁰ cm/sec
Heat of Fusion (water 1 atm, 0°C)	ΔH _{fus} = 79.7 cal/g
Heat of Vaporization (water 1 atm, 100°C)	ΔH _{vap} = 540 cal/g
Volume of Perfect Gas	22.4L/mol at 0°C, 760 torr
Faraday's Constant	F = 96485.31 C/mol
Planck's Constant	h = 6.626 x 10 ⁻²⁷ erg/sec
Bragg's Law	2d nλ = 2d sin(θ)
Absolute Zero	-273.15 °C
Temp. of Liquid Nitrogen	-195.8 °C

Unit Conversions

Temperature

°Fahrenheit	°Celsius	(°F - 32) x 5/9
°Celsius	°Fahrenheit	(°C x 9/5) + 32
°Celsius	°Kelvin	°C + 273

Mass

1 ounce	= 28.4 grams
0.03527 ounces	= 1 gram

Liquid Volume

	Multiply by
Ounces (US)	Milliliters 29.57
Pints (US)	Liters 0.47
Quarts (US)	Liters 0.95
Gallons (US)	Liters 3.8
Milliliters	Ounces (US) 0.034
Liters	Pints (US) 2.1
Liters	Quarts (US) 1.06
Liters	Gallons (US) 0.26
Cubic Feet	Cubic meters 0.03
Cubic Yards	Cubic meters 0.76

1 ppm = 1 µg/mL (wt. /vol.) and
 1 ppm = 1 µg/g (wt./wt.)
 1% = 10,000 ppm (parts per million)
 1 ppm = 1,000 ppb (parts per billion)
 1 ppb = 1,000 ppt (parts per trillion)

1 g = 1,000 mg (milligram)
 1 mg = 1,000 µg (microgram)
 1 µg = 1,000 ng (nanogram)

1 L = 1,000 mL (milliLiter)
 1 mL = 1,000 µL (microLiter)
 1 µL = 1,000 nL (nanoLiter)

Labels, Safety, Storage and Packaging

All organic solutions are in 2 mL Ampules, filled to approximately 1.2 mL to ensure 1 mL can be transferred.

2-Part Label System

Smudgeproof, tear and solvent resistant * (Organic products in ampules)

Part One can be placed into a laboratory journal to document the standard used for the analysis. This label section includes the catalog number, description, lot number, expiration date, safety information, proper storage conditions and documents AccuStandard as the manufacturer.

Part Two duplicates required information for labeling transfer vial(s) with correct information.

* Includes the most common solvents:

Methylene chloride, Methanol and Acetone



Usage, Handling and Storage

Amber ampules are used to ensure the integrity of the contents. The ampule contains at least 120% of the stated volume of a solution, allowing easy transfer. Transfer the required amount using a pipet or clean gastight syringe. Excess solution can be stored in a tightly capped vial.

Expiration dates are determined by short-term and long-term stability studies, experience and knowledge of chemical interactions. As part of our long-term studies, standards are analyzed at the end of their assigned period and sometimes can be recertified for an additional length of time.

All products come with storage conditions listed on the label of the ampule or bottle. Some chemical formulations require refrigeration or freezer storage to inhibit adverse reactions among the components. It is imperative that these conditions are followed to preserve the integrity of the material.

GHS Symbols



- Acute Toxicity (fatal or toxic)

GHS-06



GHS-02

- Flammables
- Self Reactives
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Organic Peroxides



GHS-05

- Corrosives
- Skin corrosion/burns
- Eye Damage
- Corrosive to Metals



GHS-07

- Irritant
- Skin Sensitizer
- Acute toxicity (harmful)
- Narcotic Effects
- Respiratory Tract Irritant



GHS-03

- Oxidizers



GHS-08

- Carcinogen
- Respiratory Sensitizer
- Reproductive Toxicity
- Mutagenicity
- Aspiration Toxicity

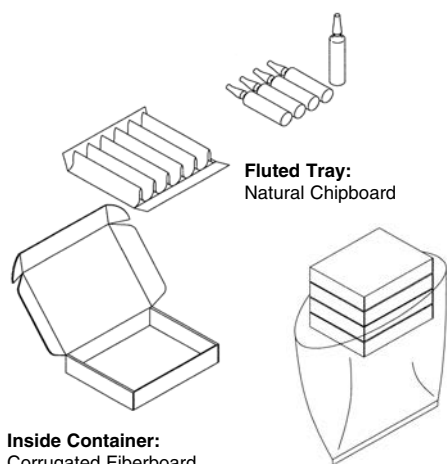


GHS-09

- Aquatic Toxicity

AccuStandard uses recyclable and biogradable material

Package compliant with DOT and International regulations.

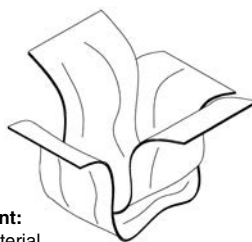


Fluted Tray:
Natural Chipboard

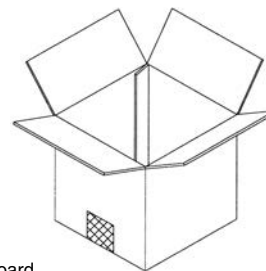
Inside Container:
Corrugated Fiberboard



Cushioning/Absorbent:
Natural Kraft Fiber Material



Shipping Container:
Natural Kraft Corrugated Fiberboard



CAS Number Index

50-00-0	72, 119, 100	75-12-7	72	84-64-0	80	94-75-7	50, 116, 196	103-41-3	98, 102	112-61-8	94
50-14-6	97	75-15-0	67, 115, 196	84-66-2	118, 78, 99, 103	94-80-4	50	103-65-1	70, 122	112-62-9	93
50-29-3	51, 117, 196	75-21-8	69, 259	84-69-5	78	94-81-5	56, 120	104-27-8	100, 102	112-63-0	93
50-32-8	39, 115, 196	75-25-2	67, 115, 196	84-74-2	118, 78, 99, 103, 90	94-82-6	51, 117	104-35-8	261	112-84-5	90
50-65-7	57, 121	75-27-4	68, 115, 196	84-75-3	78, 99, 103	94-96-2	53	104-40-5	261	113-48-4	57, 121
50-73-7	62, 124	75-34-3	68, 118, 196	84-76-4	80	95-06-7	60	104-51-8	115	114-26-1	48, 114, 260
50-81-7	97	75-34-4	196	84-77-5	80	95-13-6	40, 107	104-54-1	99, 102	115-26-4	52, 118
51-03-6	59, 259	75-35-4	68, 118	84-78-6	80	95-15-8	40	104-55-2	99, 102, 258	115-29-7	53
51-28-5	42, 44, 73, 118, 196	75-37-6	100, 103, 108	84-80-0	97	95-31-8	87	104-72-3	68	115-32-2	56, 120
51-36-5	51, 117	75-43-4	118, 100, 103, 108	85-01-8	40, 122, 197	95-33-0	87	105-05-5	69	115-86-6	62, 124, 90
51-79-6	53, 119	75-45-6	100, 103, 108	85-02-9	39	95-47-6	70, 124	105-13-5	98, 102	115-90-2	51, 117, 119
52-51-7	98, 258	75-46-7	100, 103, 108	85-34-7	53	95-48-7	73, 196	105-55-5	87	116-06-3	47, 114
52-68-6	62, 124	75-52-5	121, 82	85-40-5	61	95-49-8	68, 116	105-67-9	73, 118, 196	116-29-0	61, 123
52-85-7	53, 119, 196	75-56-9	69	85-44-9	90	95-50-1	68, 117, 196	106-22-9	99, 102	116-54-1	77, 120
53-19-0	51, 117	75-60-5	52	85-60-9	87	95-51-2	75	106-24-1	100, 102, 259	116-58-0	44, 61, 123
53-70-3	39, 196	75-62-7	67	85-68-778, 80, 115, 98, 103, 90	85-68-778, 80, 115, 98, 103, 90	95-53-4	76, 123, 197	106-32-1	97	117-79-3	43
53-96-3	43, 114, 196	75-63-8	100, 103, 108	85-70-1	78, 90	95-55-6	104, 106	106-33-2	97	117-80-6	51, 117
54-64-8	102	75-65-0	71, 115	85-83-6	105	95-57-8	73, 116, 196	106-39-8	115	117-81-7	78, 90, 99, 103, 119, 196
55-18-5	76, 121, 197	75-68-3	100, 103, 108	85-86-9	105	95-63-6	70, 124	106-40-1	75	117-82-8	78
55-38-9	54, 119	75-69-4	69, 70, 124	86-00-0	42, 44	95-69-2	75	106-42-3	70, 124	117-83-9	78
55-63-0	82	75-71-8	68, 117, 100, 103, 108	86-30-6	76, 121, 197	95-73-8	69	106-43-4	68, 116	117-84-0	78, 118, 99, 103
56-23-5	67, 115, 196	75-72-9	100, 103, 108	86-50-0	48, 114	95-76-1	75	106-44-5	73, 116, 196	118-52-5	258
56-35-9	62	75-96-7	77, 123	86-57-7	42	95-77-2	73	106-46-7	68, 117, 196	118-56-9	100, 103
56-38-2	58, 122, 197	75-99-0	51, 116	86-73-7	40, 119, 196	95-80-7	43, 75	106-47-8	75, 116, 196	118-58-1	98, 102
56-49-5	40, 120, 196	76		86-74-8	39, 115	95-85-2	104	106-48-9	73	118-60-5	100
56-55-3	39, 115, 196	76-01-7	69, 122, 197	86-86-2	57, 121	95-93-2	70	106-50-3	76, 122, 123, 101	118-74-1	19, 120, 121
56-57-5	121, 197	76-03-9	62, 77, 124	86-87-3	57	95-94-3	61, 70, 123, 197	106-79-6	90	118-79-6	74, 124
56-72-4	50, 116	76-06-2	49, 116	87-10-5	102	95-95-4	74, 124, 197	106-88-7	69	118-82-1	88
57-06-7	98, 102	76-13-1	124, 100, 103, 108	87-12-7	99	96-12-8	54, 68, 196	106-89-8	69	118-96-7	123, 83
57-11-4	89, 91	76-14-2	100, 103, 108	87-40-1	107	96-18-4	70, 124, 197	106-93-4	68, 117	119-06-2	80, 90
57-13-6	87	76-15-3	116, 100, 103, 108	87-41-2	55	96-23-1	71	106-99-0	67, 115	119-07-3	80
57-55-6	69, 101	76-44-8	55, 119, 196	87-60-5	75	96-24-2	49, 116	107-02-8	71, 114, 196	119-12-0	60
57-74-9	116, 196	76-87-9	54	87-61-6	62, 70, 124	96-32-2	77, 120	107-05-1	67, 114, 196	119-15-3	104
57-97-6	39, 118, 196	77-40-7	92	87-62-7	75	96-34-4	77	107-06-2	68, 118, 196	119-26-6	118
58-27-5	97	77-47-4	69, 120, 196	87-65-0	73, 196	96-45-7	53, 87	107-07-3	50	119-47-1	87
58-36-6	258	77-48-5	258	87-68-3	69, 120, 196	96-69-5	88	107-10-8	76	119-65-3	40
58-56-0	97	77-78-1	69	87-86-5	74, 122, 197	97-02-9	75	107-12-0	69, 122, 197	119-84-6	99, 102
58-85-5	97	77-89-4	90	87-90-1	260	97-17-6	51	107-13-1	67, 114, 196	119-90-4	43, 75
58-89-9	56, 120, 196	77-90-7	90	88-04-0	258	97-18-7	98	107-15-3	75	119-93-7	43, 75, 118, 196
58-90-2	74, 123, 197	77-92-9	258	88-06-2	62, 74, 124, 197	97-23-4	52, 118, 258	107-18-6	71, 114	120-12-7	39, 114, 196
59-30-3	97	77-93-0	90	88-24-4	87	97-39-2	87	107-19-7	71	120-32-1	257
59-40-5	60	77-94-1	90	88-27-7	87	97-53-0	100, 102	107-21-1	69, 71, 119	120-36-5	52, 118
59-50-7	73, 116, 196, 258	78-11-5	122, 83	88-72-2	42, 44, 121, 82	97-54-1	100, 102	107-49-3	61, 123	120-47-8	97, 99, 103
59-67-6	97	78-34-2	52, 118	88-73-3	44	97-56-3	74	107-75-5	100, 102	120-51-4	115, 102, 98, 257
59-89-2	121, 197	78-40-0	62, 124, 90	88-74-4	42, 76, 121, 196	97-63-2	69, 119, 196	107-87-9	72, 122	120-54-7	87
60-09-3	74	78-48-8	51, 117	88-75-5	44, 73, 121, 197	98-06-6	67, 115	107-88-0	98	120-55-8	90
60-11-7	43, 75, 118, 196	78-59-1	72, 120, 196	88-82-4	62, 124	98-07-7	70, 124	108-05-4	70, 124, 197	120-58-1	120, 196
60-29-7	77, 118	78-70-6	100, 102, 259	88-85-7	52, 118, 196	98-08-8	124	108-10-1	72, 121, 122	120-61-6	78
60-51-5	52, 118, 196	78-75-1	68, 117	88-89-1	122, 83	98-54-4	99, 102	108-38-3	70, 107, 124	120-62-7	60, 123
60-57-1	52, 118, 196	78-83-1	71, 120, 196	89-61-2	44	98-82-8	69, 120, 107	108-39-4	73, 116, 196, 258	120-71-8	75
62-38-4	58	78-87-5	68, 118, 196	89-63-4	75	98-92-0	97	108-41-8	68	120-72-9	40
62-44-2	122, 197	78-88-6	68	89-69-0	44	98-95-3	42, 69, 121, 122, 82	108-42-9	75	120-78-5	89
62-50-0	69, 119, 196	78-90-0	82	90-04-0	74	99-02-5	72, 107	108-43-0	73	120-80-9	101
62-53-3	74, 114, 196	78-93-3	72, 121, 196	90-12-0	40, 121	99-08-1	121, 82	108-45-2	101	120-82-1	62, 70, 124, 197
62-73-7	52, 118, 258	79-00-5	70, 124, 197	90-13-1	19	99-09-2	42, 76, 121, 197	108-46-3	101	120-83-2	73, 118, 196
62-75-9	76, 121, 197	79-01-6	70, 124, 197	90-15-3	57, 121	99-30-9	48, 75, 115	108-60-1	116, 196	121-14-2	42, 44, 82, 118, 119
63-25-2	49, 115	79-06-1	114	90-30-2	43, 88	99-35-4	70, 124, 83	108-67-8	70, 124	121-17-5	116
64-17-5	71, 119, 258	79-07-2	99, 258	90-41-5	43, 74	99-50-3	101, 103	108-70-3	70	121-54-0	257
64-18-6	259	79-08-3	77, 115, 121, 258	90-43-7	58, 122, 18, 259	99-52-5	75, 121	108-86-1	67, 115	121-73-3	67
65-85-0	115, 97, 90, 257	79-09-4	69, 97	90-66-4	88	99-55-8	74, 76, 121, 197	108-88-3	70, 123, 124, 107	121-75-5	56, 120
66-25-1	72, 120	79-11-8	77, 116, 121	90-98-2	51, 117	99-65-0	69, 118, 119, 82	108-90-7	67, 116, 196	121-82-4	83
66-27-3	69, 121, 196	79-14-1	259	91-20-3	40, 121, 19, 107, 259	99-76-3	97, 101, 103	108-94-1	72, 116	121-87-9	75
66-81-9	50	79-21-0	259	91-22-5	40, 92	99-87-6	69, 120	108-95-2	74, 122, 197	122-09-8	75, 118, 196
67-03-8	97	79-33-4	259	91-53-2	53	99-89-9	104, 106	109-06-8	122, 197	122-14-5	53, 119, 259
67-56-1	71, 120	79-34-5	70, 123, 197	91-57-6	40, 121, 196	99-91-2	72, 107	109-09-1	99	122-32-7	94
67-63-0	71, 120, 259	79-43-6	77	91-58-7	116, 117, 19	99-96-7	100, 103	109-43-3	90	122-34-9	60, 65, 123
67-64-1	72, 114, 196	79-74-3	88	91-59-8	43, 75, 121, 196	99-99-0	121, 82	109-97-7	40	122-39-4	75, 99, 102, 118
67-66-3	67, 116, 117, 99	79-77-6	100	91-64-5	99, 102	100-00-5	44	109-99-9	70, 123	122-40-7	98, 102
67-72-1	69, 120, 196	79-81-2	97	91-80-5	120, 196	100-01-6	42, 76, 121, 197	110-38-3	97	122-42-9	59, 122
67-97-0	97	79-82-0	104	91-94-1	43, 75, 117, 196	100-02-7	42, 44, 73, 121, 197	110-42-9	94	122-57-6	101, 102
68-19-9	97	82-45-1	43	79-94-7	89	101-17-4	58, 121	110-44-1	97, 260	122-62-3	90
69-72-7	102, 260	82-66-6	52	79-97-0	92	101-41-4	69, 119, 196	110-56-5	68, 117	122-66-7	43
70-25-7	43, 44	82-68-8	58, 122, 197	80-05-7	73, 90	101-42-8	54, 119	110-57-6	68, 117, 196	122-88-3	50, 116
70-30-4	69, 120, 121, 100	82-71-3	83	80-09-1	92	101-54-2	101	110-62-3	72, 122	122-99-6	259
71-23-8	71, 122, 260	83-05-6	51, 117	80-33-1	58	101-55-3	115, 196	110-75-8	77, 116	123-01-3	69
71-36-3	71, 115	83-26-1	59	80-38-6	54	101-72-4	87	110-80-5	99	123-02-4	70
71-43-2	67, 115, 196	83-32-9	39, 114, 196	80-54-6	98, 102	101-77-9	43, 75	110-82-7	68	123-03-5	258
71-55-6	70, 124, 197	83-66-9	102	80-62-6	69, 121, 122, 101	101-80-4	76	110-86-1	44, 76, 122, 197	123-28-4	87
72-20-8	53, 119, 196	83-79-4	60, 123, 260	81-20-9	69, 118	101-85-9	98, 102	111-03-5	94	123-33-1	56
72-43-5	57, 120, 196	83-88-5	97	81-81-2	63, 260	101-86-0	100, 102	111-11-5	94	123-38-6	72, 122
72-54-8	51, 117, 196	84-15-1	19, 89	81-82-3	50	102-06-7	89	111-12-6	101, 102	1	

CAS Number Index

126-73-8	124, 90	192-65-4	39	510-15-6	49, 116, 196	610-48-0	40	888-54-0	71, 114	1527-96-4	71, 116
126-75-0	51, 117	192-97-2	39	512-56-1	62, 124	610-49-1	43	892-21-7	42	1527-97-5	72, 120
126-98-7	69, 120, 196	193-39-5	40, 120, 196	513-88-2	72, 118	611-06-3	44	900-95-8	54	1527-98-6	71, 115
126-99-8	68, 116, 196	194-59-2	39	523-31-9	78	611-14-3	69	918-00-3	72, 124	1528-49-0	90
127-18-4	70, 123, 197	195-19-7	39	525-64-4	43	611-64-3	23	919-30-2	89	1532-24-7	50, 116
127-41-3	100	198-55-0	40	526-73-8	70, 308	612-78-2	39	919-86-8	51, 117	1563-38-8	52
127-51-5	99, 102	203-64-5	40	527-20-8	58	612-94-2	40	924-16-3	76, 121, 197	1563-66-2	49, 115
127-54-8	92	205-82-3	39	527-53-7	70	613-06-9	39	928-96-1	107	1567-89-1	72, 114
127-90-2	60	205-99-2	39, 115, 196	528-29-0	118, 82	613-12-7	40	929-77-1	94	1570-64-5	49
128-03-0	59, 259	206-44-0	40, 119, 196	531-59-9	100, 102	613-13-8	43	930-55-2	121, 197	1571-75-1	92
128-04-1	51	207-08-9	39, 115	531-85-1	75	613-31-0	39	933-75-5	74	1576-67-6	40
128-37-0	88, 98	208-96-8	39, 114, 196	532-27-4	72, 107	615-58-7	73	933-78-8	74	1582-09-8	62, 124
128-39-2	87	209-61-4	, 19	532-32-1	97, 260	615-59-8	307	934-73-6	23	1589-62-4	72, 116
129-00-0	40, 122, 197	213-46-7	40	532-34-3	55	616-47-7	92	935-95-5	74	1610-17-9	55, 65
129-06-6	260	214-17-5	39	533-23-3	51, 116	617-54-9	99, 102	941-81-1	40	1610-18-0	59, 65, 122
129-79-3	42	215-58-7	39	533-74-4	51, 117, 258	618-85-9	82	943-88-4	100, 102	1610-39-5	40
130-15-4	121, 196	217-59-4	40	534-52-1	42, 52, 73, 118, 196	618-87-1	118, 82	944-22-9	53, 119	1633-14-3	261
131-11-3	118, 78, 99, 103	218-01-9	39, 116, 196	535-89-7	50	619-15-8	69, 118	947-02-4	59, 122	1634-04-4	77, 121
131-16-8	78	224-42-0	39	537-39-3	94	620-12-2	82	950-10-7	56	1634-78-2	56
131-17-9	78	226-36-8	39	537-40-6	94	620-14-4	69	950-35-6	57	1646-87-3	47, 114
131-18-0	78, 99, 103	230-27-3	39	538-23-8	94	620-64-4	94	950-37-8	57, 120	1646-88-4	47, 114
131-54-4	91	238-84-6	39	538-24-9	94	620-88-2	, 19	953-17-3	57	1665-00-5	69, 120
131-56-6	91	243-17-4	39	538-68-1	67	620-92-8	92	954-46-1	42	1675-54-3	92
131-57-7	91, 98, 103	260-94-6	39	538-93-2	67	621-07-8	87	957-51-7	52, 118	1689-83-	55
131-70-4	79, 101, 103	262-12-4	, 21	540-36-3	69, 118	621-64-7	76, 121, 197	959-98-8	53, 119, 196	1689-83-4	120
131-72-6	56	262-16-8	23	541-73-1	68, 117, 196	621-65-8	82	961-11-5	61, 123	1689-84-5	48, 115
131-73-7	82	271-89-6	39	542-44-9	94	621-71-6	94	962-58-3	51	1689-99-2	49
131-74-8	82	275-51-4	39	542-75-6	68, 118	622-62-8	100, 102	976-56-7	87	1694-09-3	104
131-89-5	52, 73, 118	283-66-9	82	542-76-7	68	622-96-8	69	991-84-4	88	1698-60-8	59, 122
132-27-4	257	288-88-0	62, 123	542-88-1	116	623-43-8	101, 102	994-05-8	77, 123	1702-17-6	56, 120
132-64-9	, 117, 118, 23	290-87-9	43, 44	544-10-5	67, 116	623-87-0	82	999-81-5	49	1705-85-7	40
132-65-0	39	297-78-9	55	544-35-4	97	624-43-1	82	1007-28-9	47, 65, 114	1709-70-2	87
132-66-1	47, 114	297-97-2	62, 123, 197	545-06-2	70, 124	626-15-3	68, 117	1014-69-3	51	1713-15-1	51
133-06-2	49, 115, 258	298-00-0	57, 121, 196	548-35-6	40	626-39-1	70, 124	1014-70-6	60, 123	1717-00-6	108
133-07-3	54, 119, 259	298-02-2	58, 122, 197	548-62-9	104	626-43-7	71, 114	1019-57-4	71, 114	1718-51-0	123
133-90-4	49, 116	298-04-4	52, 118, 196	554-84-7	73	627-93-0	90	1022-22-6	51, 117	1718-52-1	122
134-20-3	259	299-84-3	60, 123	555-37-3	57, 121	628-96-6	119, 82	1024-57-3	55, 119, 196	1718-53-2	115
134-32-7	43, 121, 196	299-86-5	50, 116	555-43-1	94	628-97-7	97	1031-07-8	53, 119, 196	1719-03-5	116
134-62-3	51, 117, 258	300-76-5	57, 121, 259	555-44-2	94	629-50-5	308	1066-51-9	47	1719-06-8	114
135-01-3	69	301-00-8	93	555-45-3	94	629-59-4	308	1071-83-6	55	1726-77-8	122
135-88-6	43	301-01-9	93	556-22-9	55	629-62-9	307	1072-62-4	92	1729-67-5	69, 120
135-98-8	67, 115	301-12-2	58, 122	556-61-6	69, 121	629-97-0	307	1076-43-3	67, 115	1731-84-6	94
136-17-4	104, 106	302-01-2	120, 82	556-88-7	121, 82	630-20-6	70, 123, 197	1077-16-3	69	1731-86-8	94
136-45-8	57, 121	302-17-0	67, 115	557-30-2	53	631-64-1	77, 117	1078-71-3	69	1731-88-0	94
136-78-7	52	306-83-2	108	557-48-2	107	632-99-5	104	1079-21-6	18	1731-92-6	94
137-08-6	97	309-00-2	47, 196	558-13-4	67	633-96-5	105	1081-15-8	72, 119	1731-94-8	94
137-09-7	99	311-45-5	58, 122	563-12-2	53, 119	634-66-2	61, 70	1081-77-2	69	1746-01-6	, 21
137-17-7	76	314-40-9	48, 115	563-58-6	68, 69, 118	634-87-7	83	1085-12-7	100, 103	1746-81-2	57, 259
137-26-8	62, 123, 102, 260	315-18-4	57, 121	569-41-5	39	634-90-2	61, 70	1085-98-9	51, 258	1763-23-1	107
137-30-4	63, 124, 260	316-14-3	40	569-61-9	104, 105	636-09-9	78	1111-67-7	258	1770-80-5	51, 117
137-40-6	97	316-49-4	40	571-53-4	39	636-30-6	76	1113-02-6	58, 122	1773-44-0	72, 123
139-40-2	59, 65, 122	316-51-8	39	571-61-9	39	639-58-7	62	1114-71-2	62, 123	1777-82-8	258
139-65-1	76	317-64-6	39	573-58-0	104	640-15-3	62	1119-97-7	259	1806-26-4	261
140-03-4	90	319-84-6	48, 196	573-98-8	39	640-19-7	69	1120-25-8	93	1806-29-7	18
140-29-4	98, 102	319-85-7	48, 115, 196	575-41-7	39	644-64-4	52	1120-28-1	94	1817-73-8	75
140-41-0	57, 121	319-86-8	48, 115, 196	575-43-9	39	646-31-1	308	1120-34-9	93	1825-19-0	57
140-56-7	53, 119	321-38-0	119	575-89-3	61	652-04-0	40	1122-62-9	98	1825-21-4	58, 122
140-57-8	47, 114, 196	321-60-8	119, 20	575-90-6	50, 116	672-99-1	115	1129-41-5	57	1825-31-6	19
140-66-9	261	323-09-1	119	576-24-9	73	673-04-1	60	1134-23-2	50, 116	1836-74-4	, 19
140-88-5	99, 102	327-98-0	62, 124	577-19-5	67, 115	680-31-9	55	1137-59-3	17	1836-75-5	58, 56, 19
140-95-4	257	330-54-1	56, 120, 258	580-51-8	18	693-21-0	82	1146-65-2	121	1836-77-7	, 19
141-05-9	99, 102	330-55-2	56, 120	581-42-0	39	693-36-7	87	1154-59-2	102	1843-05-6	91
141-10-6	99, 102	333-18-6	99	581-89-5	42	693-98-1	92	1157-84-2	71, 115	1844-01-5	92
141-23-1	94	333-41-5	51, 117, 258	582-16-1	39	694-80-4	67, 115	1163-19-5	89	1861-32-1	51, 116
141-24-2	93	334-48-5	258	583-78-8	73	697-91-6	261	1191-41-9	97	1861-40-1	48, 114
141-43-5	101	335-67-1	107	584-79-2	47, 114, 257	709-98-8	59, 122	1194-65-6	51, 117	1868-53-7	68, 117
141-66-2	52, 118	348-51-6	116	587-98-4	105	725-00-8	72, 122	1212-97-9	257	1888-71-7	69, 120, 196
141-78-6	69, 119	352-33-0	67, 116, 307	589-68-4	94	730-40-5	104	1216-44-0	54, 119	1897-45-6	50, 116, 258
141-86-6	104, 106	353-59-3	115, 108	590-00-1	97	731-27-1	62, 260	1241-94-7	90	1910-42-5	58, 122
141-93-5	69	354-33-6	108	591-35-5	73	732-11-6	55, 120	1303-86-2	258	1912-24-9	47, 65, 114
142-18-7	94	359-35-3	108	591-78-6	72, 120, 196	741-58-2	48, 115	1305-62-0	258	1912-26-1	62
142-28-9	68, 118	363-72-4	69, 122	593-51-1	57	744-45-6	78	1305-78-8	258	1918-00-9	51, 117
142-59-6	57, 121, 259	367-12-4	73, 119	594-20-7	68, 118	759-94-4	53	1310-73-2	102	1918-02-1	59, 122
142-77-8	90	371-40-4	75, 119	598-02-7	52, 118	771-61-9	74, 122	1314-84-7	63	1918-11-2	61
143-07-7	259	388-82-9	118, 20	598-72-1	115	776-34-1	42	1314-98-3	260	1918-13-4	50
143-50-0	56, 120, 196	391-48-7	, 19	598-77-6	124	779-02-2	40	1317-38-0	258	1918-16-7	59, 122
144-21-8	53	398-23-2	118	598-99-2	77, 121	781-43-1	39	1317-39-1	258	1918-18-9	61, 123
145-73-3	53, 119	420-04-2	258	600-05-5	117	786-19-6	49, 115	1321-64-8	19, 20, 89	1928-37-6	61, 123
146-50-9	78	420-46-2	108	602-38-0	42	789-02-6	51, 117	1323-83-7	94	1928-38-7	51, 116
147-47-7	88	434-90-2	117, 20	602-55-1	40	811-97-2	123, 100, 103, 108	1330-20-7	70, 124, 197	1928-43-4	51, 116
148-79-8	61, 123, 260	438-22-2	307	602-60-8	42	813-78-5	52, 118	1330-43-4	260	1929-73-3	50, 116
149-30-4	87, 120, 89, 259	460-00-4	67, 115, 307	602-87-9	42	822-36-6	92	1330-78-5	62, 124, 90	1929-77-7	63, 124
150-50-5	56, 120	462-06-6	69, 119	603-85-0	104, 106	822-55-9	92	1332-40-7	50	1929-82-4	58
150-68-5	57, 121	465-73-6	55, 120, 196	605-02-7	40	827-94-1	75	1335-87-1	19, 20, 89	1934-21-0	104
150-76-5	100	470-90-6	49, 116	605-45-8	78	831-52-7	122, 83	1338-23-4	90	1937-37-7	104
152-16-9	60	477-73-6	104, 106	605-50-5	78</						

CAS Number Index

2051-60-7	3	2593-15-9	61, 123	3735-33-9	59	6683-19-8	87, 88	10061-01-5	68, 118, 196	16752-77-5	57, 120
2051-61-8	3	2595-54-2	56	3761-41-9	54	6734-80-1	57, 259	10061-02-6	68, 118, 196	16753-62-1	89
2051-62-9	3	2597-03-7	58, 122	3761-42-0	54	6742-54-7	70	10081-67-1	88	16883-83-3	88
2051-79-8	104, 106	2600-69-3	58	3761-53-3	104	6916-74-1	94	10117-38-1	260	17024-19-0	42
2052-07-5	115	2602-46-2	104	3766-60-7	49	6923-22-4	57, 121	10191-41-0	88, 97	17040-19-6	51
2055-46-1	59	2606-85-1	40	3766-81-2	114	6967-29-9	49	10222-01-2	258	17060-07-0	68, 118
2057-84-3	72, 122	2631-37-0	59, 122	3784-03-0	260	6988-21-2	52, 118	10265-92-6	57, 121	17088-37-8	83
2070-08-9	196	2631-40-5	56	3806-34-6	87	7005-72-3	116, 117, 20	10290-37-6	52, 65	17109-49-8	53
2074-05-7	120	2634-33-5	257	3811-73-2	260	7012-37-5	3	10311-84-9	51	17540-75-9	88
2081-08-5	92	2635-10-1	57	3813-05-6	48, 114	7080-50-4	258	10386-84-2	117, 20	17606-31-4	48
2082-79-3	87	2636-26-2	50	3844-45-9	104	7085-19-0	56, 120	10396-10-8	88	17640-02-7	51, 117
2093-28-9	19	2642-71-9	47, 114	3855-82-1	68, 117	7132-64-1	94	10453-86-8	60	17700-09-3	44
2104-64-5	53, 119	2642-81-1	50	3860-63-7	104	7173-51-5	258	10548-10-4	61	17781-16-7	49
2104-96-3	48	2642-98-0	43	3896-11-5	87	7194-86-7	307	10552-74-6	58	17804-35-2	48, 114
2113-58-8	42, 44	2655-14-3	63	3964-18-9	118, 82	7235-40-7	97	10595-95-6	76, 121, 197	17851-53-5	80
2131-18-2	69	2655-15-4	62, 124	4075-81-4	97	7286-69-3	60, 65	10605-21-7	49, 115, 258	18181-70-9	55, 120
2132-70-9	57, 120	2664-63-3	62, 123	4076-39-5	40	7286-84-2	49, 116	10606-46-9	52	18181-80-1	48
2136-79-0	51, 117	2671-93-4	19	4076-40-8	40	7287-19-6	59, 65, 122, 260	11032-49-8	97	18259-05-7	5
2136-99-4	6	2675-77-6	49	4076-43-1	39	7287-36-7	57	11096-82-5	16, 89	18281-05-5	97
2142-68-9	72, 107	2682-20-4	259	4130-42-1	87	7291-22-7	76, 122	11097-59-9	87	18318-83-7	100, 102
2163-68-0	55, 65, 120	2686-99-9	62, 124	4147-51-7	52	7297-25-8	82	11097-69-1	16, 89	18625-12-2	51, 117
2163-69-1	50	2691-41-0	120, 82	4164-28-7	82	7313-54-4	47, 65	11100-14-4	16, 89	18641-57-1	94
2163-80-6	49, 115	2716-53-2	94	4165-60-0	69, 121	7421-93-4	53, 119, 196	11104-28-2	16, 89	18691-97-9	57
2164-08-1	56	2732-58-3	40	4165-61-1	74, 114	7439-44-3	93	11126-42-4	19, 89	18829-55-5	100, 102
2164-17-2	119, 54, 259	2733-88-2	93	4165-62-2	74, 122	7439-92-1	100, 103	11141-16-5	16, 89	19044-88-3	58, 122
2167-51-3	92	2734-47-6	93	4191-73-5	100, 103	7439-97-6	100, 103	11141-17-6	47	19406-51-0	114, 82, 114
2179-25-1	57	2777-58-4	93	4247-02-3	100, 103	7440-02-0	101, 103	12069-69-1	50, 258	19408-74-3	21
2181-42-2	62	2783-94-0	104, 105	4265-25-2	107	7440-22-4	260	12071-83-9	59	19666-30-9	58, 122
2189-60-8	69	2786-19-7	120	4306-88-1	88	7440-38-2	98, 103	12122-67-7	63, 260	19670-49-6	94
2199-69-1	68, 117	2795-39-3	107	4345-03-3	97	7440-47-3	99, 103	12222-75-2	104	19719-28-9	77, 118
2212-67-1	57, 121	2797-51-5	60	4376-18-5	79, 101, 103	7440-48-4	99, 103	12222-97-8	104	19937-59-8	57
2227-13-6	61	2813-95-8	52	4376-20-9	79, 101, 103	7440-50-8	258	12427-38-2	56	19988-24-0	47, 65
2234-13-1	19, 20, 89	2814-20-2	56	4445-07-2	69	7440-67-7	102, 103	12642-23-8	19, 89	20020-02-4	19
2256-01-1	120	2825-82-3	307	4482-55-7	54, 119	7477-94-3	23	12672-29-6	16, 89	20062-22-0	82
2275-23-2	63	2828-42-4	59	4548-53-2	105, 106	7492-55-9	258	12674-11-2	16, 89	20115-23-5	58
2277-28-3	94	2832-40-8	104	4602-84-0	100, 102	7496-02-8	42	12767-90-7	260	20246-55-3	94
2303-16-4	51, 68, 117, 196	2837-89-0	108	4682-03-5	82	7517-36-4	79	12771-68-5	47	20268-51-3	42
2303-17-5	62, 123	2872-48-2	104	4719-04-4	259	7553-56-2	259	12789-03-6	49	20427-59-2	258
2303-23-3	19	2872-52-8	104	4726-14-1	58	7631-86-9	260	13029-08-8	3	20427-84-3	261
2306-33-4	79, 101, 103	2880-05-9	72, 123	4824-78-6	48, 115	7631-90-5	260	13067-93-1	50	20428-74-4	77, 120
2307-68-8	58	2905-67-1	57, 120	4841-20-7	60, 123	7631-99-4	97	13071-79-9	61, 123	20428-75-5	77, 120
2310-17-0	59, 122	2921-88-2	53, 116, 119	4849-32-5	56	7632-00-0	97, 102	13103-52-1	87	20428-76-6	77
2312-35-8	59, 122	2941-55-1	53	4901-51-3	74	7647-14-5	260	13121-70-5	50	20624-25-3	60
2319-96-2	40	2943-75-1	89	5074-71-5	117	7647-15-6	260	13171-21-6	59, 122	20632-35-3	23
2348-19-8	122	2974-90-5	3	5103-71-9	49, 116	7664-38-2	259	13181-17-4	48	20667-12-3	258
2371-42-8	107	2974-92-7	3	5103-73-1	58, 121	7681-57-4	260	13184-80-0	82	20839-34-3	93
2381-15-9	40	2976-74-1	50, 118	5103-74-2	49, 116	7695-91-2	97	13194-48-4	53, 119	21061-10-9	93
2381-16-0	40	3017-95-6	67, 115	5131-24-8	52	7696-12-0	61, 260	13301-61-6	104	21087-64-9	57, 121
2381-19-3	40	3018-12-0	68, 117	5234-68-4	49, 115	7700-17-6	50	13356-08-6	53	21105-77-1	19
2381-71-7	40	3032-55-1	83	5259-88-1	58, 122	7722-64-7	260	13360-45-7	49	21232-47-3	23
2385-85-5	57, 121	3058-38-6	83	5278-95-5	77, 116	7747-35-5	258	13457-18-6	59	21245-02-3	101, 103
2390-09-2	93	3060-89-7	57	5281-04-9	104	7757-79-1	97	13463-41-7	260	21564-17-0	49, 258
2390-60-5	104, 106	3064-70-8	257	5307-14-2	105, 106	7757-83-7	260	13487-42-8	93	21609-90-5	56, 120
2398-96-1	260	3064-73-1	87	5315-79-7	43	7758-09-0	97	13593-03-8	60	21725-46-2	50, 65, 116
2425-06-1	49, 115	3081-14-9	87	5334-09-8	80	7758-19-2	260	13595-25-0	92	22042-59-7	49
2432-90-8	78	3089-11-0	89	5385-75-1	39	7758-98-7	258	13684-56-5	51	22212-55-1	48
2433-97-8	94	3114-55-4	67	5392-40-5	99, 102	7761-88-8	260	13684-63-4	58	22224-92-6	53, 119
2435-54-3	261	3115-49-9	261	5393-19-1	79	7773-06-0	47	13706-86-0	101, 102	22532-68-9	19
2436-73-9	56, 120	3115-97-6	105	5405-53-8	42	7775-09-9	260	13927-77-0	88, 89	22532-80-5	19
2436-96-6	42, 44	3118-97-6	105	5409-83-6	23	7775-27-1	260	13980-04-6	82	22610-63-5	94
2437-79-8	4	3147-75-9	87	5410-97-9	23	7778-44-1	49	14010-23-2	97	22781-23-3	48, 114, 257
2439-01-2	49	3179-89-3	104	5413-75-2	104, 106	7778-50-9	101, 103	14047-09-7	23	22936-75-0	52
2439-10-3	52	3179-90-6	104	5445-17-0	69, 120	7778-54-3	258	14143-55-6	59, 122	22936-86-3	50, 116
2440-22-4	91	3209-22-1	44	5466-77-3	101, 103	7783-20-2	257	14214-32-5	52	23031-36-9	59, 260
2442-49-1	94	3222-05-7	77, 121	5522-43-0	42	7783-90-6	260	14324-55-1	87, 89	23103-98-2	59, 122
2444-89-5	20	3244-88-0	104	5546-53-6	259	7786-34-7	57, 121	14465-68-0	94	23128-74-7	88
2445-83-2	101, 102	3244-90-4	47	5589-96-8	77, 115	8001-35-2	62, 123, 197	14484-64-1	54, 119	23135-22-0	58, 122
2462-84-2	93	3252-43-5	68, 117	5598-13-0	50, 116	8001-50-1	60	14752-75-1	69	23184-66-9	49, 115
2463-02-7	93	3268-87-9	19, 21	5598-15-2	50	8001-75-0	90	14807-96-6	102	23355-64-8	104
2463-84-5	51, 117	3296-43-3	94	5625-90-1	259	8003-34-7	45, 59, 260	14816-18-3	59	23422-53-9	54
2475-45-8	104	3319-31-1	90	5836-10-2	50, 116	8004-87-3	104	14868-03-2	92	23505-41-1	59
2475-46-9	104	3336-39-8	48	5836-29-3	50, 258	8006-50-4	100	14962-28-8	17	23560-59-0	55
2497-06-5	52, 118	3337-71-1	47, 114	5873-93-8	90	8006-64-2	308	14962-32-4	17	23564-05-8	62
2497-07-6	52	3347-22-6	52	5902-51-2	61, 123	8007-00-9	98	15067-26-2	114	23564-06-9	62, 123
2498-66-0	39	3351-30-2	40	5908-87-2	97	8007-45-2	99	15096-52-3	50	23719-22-4	17
2498-75-1	40	3380-34-5	260	5915-41-3	61, 65, 123, 260	8008-20-6	307	15263-53-3	49	23844-56-6	56
2498-76-2	40	3383-96-8	47	5989-27-5	100, 102, 259	8013-07-8	90	15299-99-7	57, 121	23947-60-6	53
2498-77-3	40	3386-33-2	307	6046-90-0	94	8018-01-7	56	15310-01-7	48	23950-58-5	59, 122, 197
2528-16-7	79, 101, 103	3391-86-4	259	6099-79-2	52, 77, 118	8021-39-4	258	15457-05-3	54	24009-05-0	55, 120
2530-83-8	89	3397-62-4	47	6164-98-3	49	8024-12-2	102	15545-48-9	50, 258	24017-47-8	62, 123
2531-84-2	40	3424-82-6	51, 117	6190-65-4	114, 47, 65	8030-30-6	307	15862-07-4	3	24038-68-4	92
2536-31-4	49, 116	3457-98-5	105	6219-67-6	100	8050-09-7	90	15879-93-3	258	24151-93-7	59
2540-82-1	54, 119	3478-94-2	59	6283-63-2	106	8052-41-3	308	15950-66-0	74	24307-26-4	56
2541-69-7	40	3531-19-9	75	6317-18-6	259	8061-51-6	260	15968-05-5	4	24353-61-5	55
2545-59-7	61, 123	3567-62-2	52	6368-72-5	105	8065-48					

CAS Number Index

25038-32-8	87	33245-39-5	54, 119	39227-58-2	21	52663-75-9	6	60238-56-4	50	69119-90-0	93
25057-89-0	48, 115	33284-50-3	3	39227-61-7	21	52663-76-0	6	60348-60-9	89	69119-99-9	93
25265-77-4	90	33284-52-5	4	39227-62-8	21	52663-77-1	6	60397-77-5	52	69278-58-6	17
25311-71-1	55, 120	33284-53-6	4	39236-46-9	100	52663-78-2	6	60568-05-0	54	69327-76-0	49
25322-68-3	71, 101	33284-54-7	4	39300-45-3	52, 118	52663-79-3	6	60586-60-9	94	69377-81-7	54
25569-80-6	3	33423-92-6	21	39450-05-0	19, 20, 89	52704-70-8	5	60640-54-2	18	69581-33-5	50
25660-41-1	9	33543-31-6	40	39515-40-7	50, 258	52712-04-6	5	60640-55-3	18	69782-90-7	5
25637-84-7	94	33629-47-9	49	39515-41-8	51, 117	52712-05-7	6	60825-26-5	124	69782-91-8	6
25655-41-8	259	33685-60-8	42	39635-31-9	6	52744-13-5	5	61012-47-3	93	69797-51-9	18
25773-40-4	107	33693-04-8	61	39635-32-0	5	52756-22-6	48	61213-25-0	54	69797-52-0	18
25837-05-2	69, 119	33820-53-0	56, 120	39635-33-1	5	52756-25-9	54, 119	61432-55-1	52	69806-34-4	55, 119
25956-17-6	104	33857-26-0	21	39635-34-2	5	52888-80-9	59	61592-45-8	48, 115	69806-40-2	55, 119
26002-80-2	61, 123, 260	33857-28-2	21	39635-35-3	5	52918-63-5	51, 117, 258	61790-53-2	260	69806-50-4	54, 119
26027-38-3	98	33979-03-2	5	39765-80-5	58, 121	53112-28-0	60	61798-70-7	5	70124-77-5	54
26087-47-8	55	34014-18-1	61, 123	39807-15-3	58	53380-22-6	53	61951-51-7	104	70321-86-7	87
26225-79-6	53	34123-57-4	56	40088-47-9	89	53380-23-7	53	62610-77-9	57	70331-94-1	88
26259-45-0	60, 123	34123-59-6	56, 259	40186-70-7	6	53404-76-5	60	62796-65-0	4	70356-09-1	98, 103
26266-77-3	100, 102	34137-09-2	88	40186-71-8	6	53469-21-9	16, 89	62850-32-2	54	70362-41-3	5
26399-36-0	59, 122	34205-21-5	52	40186-72-9	6	53494-70-5	53, 119	62924-70-3	54	70362-45-7	4
26444-49-5	90	34256-82-1	47, 114	40321-76-4	21, 197	53555-66-1	3	63041-76-9	40	70362-46-8	4
26523-78-4	87, 88	34622-58-7	58	40487-42-1	58, 122	53558-25-1	63, 124	63041-77-0	40	70362-47-9	4
26530-20-1	58, 259	34643-46-4	62, 123	40596-69-8	57, 120	53563-63-6	94	63041-90-7	42	70362-48-0	4
26644-46-2	62	34681-10-2	49	40601-76-1	87	53894-23-8	90	63104-32-5	40	70362-49-1	4
26657-95-4	94	34681-23-7	49	40843-25-2	52	53905-28-5	17	63104-33-6	39	70362-50-4	4
26741-53-7	87, 88	34681-24-8	49	41083-11-8	48	53905-29-6	17	63284-71-9	62	70424-67-8	4
26761-40-0	80, 99, 103	34803-66-2	296	41198-08-7	59, 122	53905-30-9	17	63449-39-8	88	70424-68-9	5
26780-96-1	88	34816-53-0	21	41394-05-2	57, 120	53905-33-2	17	63449-41-2	257	70424-70-3	5
27138-31-4	90	34883-39-1	3	41411-61-4	5	53988-07-1	94	63496-31-1	19, 89	70592-80-2	259
27208-37-3	39	34883-41-5	3	41411-62-5	5	53988-10-6	87	64249-01-0	47	70624-18-9	87
27215-22-1	80	34883-43-7	3	41411-63-6	5	54230-22-7	4	64529-56-2	53	70630-17-0	56
27304-13-8	58, 122	35065-27-1	5	41411-64-7	6	54406-48-3	53, 258	64628-44-0	62, 260	70644-19-8	40
27314-13-2	58	35065-28-2	5	41464-39-5	4	54460-46-7	50	64700-56-7	62	70693-62-8	260
27344-41-8	87	35065-29-3	6	41464-40-8	4	54536-17-3	21	64742-47-8	307	70862-65-6	258
27519-02-4	260	35065-30-6	6	41464-41-9	4	54589-71-8	23	64742-54-7	307	70892-10-3	307
27554-26-3	80, 90, 99, 103	35074-77-2	88	41464-42-0	4	54593-83-8	40	64742-89-8	307	71133-14-7	77, 115
27605-76-1	59	35118-50-4	79	41464-43-1	4	54827-17-7	76	64902-72-3	50, 116	71283-80-2	54
27638-00-2	94	35256-85-0	61	41464-46-4	4	54886-63-9	39	65140-91-2	88	71422-67-8	49
27668-52-6	258	35367-38-5	52, 258	41464-47-5	4	54965-21-8	47	65447-77-0	87	71526-69-7	56
27676-62-6	87, 88	35400-43-2	48, 115	41464-48-6	4	55179-31-2	48	65510-44-3	5	71561-11-0	59
28034-99-3	17	35554-44-0	55, 259	41464-49-7	4	55215-18-4	5	65733-16-6	259	71626-11-4	48
28044-83-9	55, 119	35572-78-2	114, 82	41483-43-6	49	55219-65-3	62	65907-30-4	54	71751-41-2	47, 257
28057-48-9	48	35575-96-3	47, 114, 257	41484-35-9	88	55283-68-6	53, 119	66063-05-6	58	71888-89-6	80, 90
28159-98-0	55, 259	35691-65-7	101, 258	41556-26-7	87	55285-14-8	49, 115	66215-27-8	50, 116, 258	71925-18-3	21
28249-77-6	61, 123	35693-92-6	3	41814-78-2	62, 124	55290-64-7	52	66230-04-4	53, 258	71998-76-0	21
28424-00-6	48	35693-99-3	4	41903-57-5	21	55335-06-3	62, 124	66246-88-6	58	72170-45-7	80
28434-01-7	48	35694-04-3	5	42397-64-8	42	55512-33-9	60	66332-96-5	54	72375-21-4	296
28473-03-2	56	35694-06-5	5	42397-65-9	42	55566-30-8	260	66441-23-4	54, 119	72375-24-7	296
28553-12-0	90	35694-08-7	6	42429-88-9	19, 19	55635-13-7	47	66640-58-2	18	72375-27-0	296
28772-56-7	48, 258	35822-46-9	21	42429-92-5	40	55682-88-7	93	66640-59-3	18	72490-01-8	259
29027-13-2	57	36354-80-0	94	42488-57-3	77, 19	55684-94-1	23, 197	66640-60-6	18	72963-72-5	55, 259
29082-74-4	19	36443-68-2	88	42509-80-8	55	55702-45-9	3	66640-61-7	18	73250-68-7	56
29091-05-2	52	36483-60-0	89	42576-02-3	48, 115	55702-46-0	3	66840-71-9	52	73557-53-8	4
29091-21-2	59	36559-22-5	4	42609-52-9	51	55712-37-3	3	66841-25-6	62	73575-52-7	4
29104-30-1	48	36734-19-7	55, 120	42740-50-1	6	55720-44-0	3	67129-08-2	57, 120	74051-80-2	60
29136-19-4	69	36861-47-9	101, 103	42822-86-6	259	55954-23-9	57, 77, 120	67306-00-7	54	74070-46-5	47
29232-93-7	59, 122	37324-23-5	16, 89	42874-03-3	58, 122	56030-56-9	5	67323-56-2	21	74115-24-5	50
29446-15-9	21	37515-51-8	43	43121-43-3	62	56070-16-7	61	67375-30-8	50, 258	74222-97-2	60
29450-45-1	56	37515-61-0	94	50471-44-8	63, 124	56073-07-5	52, 258	67485-29-4	55, 259	74223-64-6	57, 121
29598-76-3	88	37680-65-2	3	50512-35-1	56	56073-10-0	48, 257	67564-91-4	54, 259	74338-23-1	4
29761-21-5	90	37680-66-3	3	50563-36-5	52	56219-10-4	97	67628-93-7	52	74338-24-2	4
29973-13-5	53	37680-68-5	3	50585-41-6	23	56399-71-4	94	67651-34-7	17	74472-33-6	4
30007-47-7	98	37680-69-6	3	50585-46-1	21	56425-91-3	54	67651-35-8	17	74472-34-7	4
30043-49-3	53	37764-25-3	51, 117	50594-66-6	47, 114	56558-17-9	5	67651-36-9	17	74472-35-8	5
30125-63-4	61	37910-77-3	97	50594-67-7	47, 114	56558-18-0	5	67651-37-0	17	74472-36-9	5
30402-14-3	23	38082-89-2	122, 83	51026-28-9	59	56634-95-8	48	67746-30-9	100, 102	74472-37-0	5
30560-19-1	47, 114	38178-38-0	21	51200-87-4	258	56849-83-3	40	67747-09-5	59	74472-38-1	5
30606-27-0	94	38260-54-7	53	51207-31-9	23	57018-04-9	62	68157-60-8	54	74472-39-2	5
30614-22-3	59	38380-03-9	5	51218-45-2	57, 121	57117-31-4	23	68186-30-1	90	74472-40-5	5
30667-99-3	57, 120	38380-04-0	5	51218-49-6	59	57117-41-6	23, 197	68194-04-7	4	74472-41-6	5
30746-58-8	21	38380-05-1	5	51229-78-8	101, 260	57153-17-0	52, 118	68194-08-1	5	74472-42-7	5
30833-53-5	79	38380-07-3	5	51230-49-0	23	57153-18-1	56, 120	68194-09-2	5	74472-44-9	5
30979-48-7	55	38380-08-4	5	51235-04-2	55, 120	57369-32-1	60	68194-10-5	5	74472-45-0	5
31218-83-4	59	38411-22-2	5	51338-27-3	52, 118	57465-28-8	5	68194-11-6	5	74472-46-1	5
31450-14-3	97	38411-25-5	6	51437-89-9	261	57646-30-7	54	68194-12-7	5	74472-47-2	6
31508-00-6	5	38444-73-4	3	51437-90-2	261	57653-85-7	21	68194-13-8	5	74472-48-3	6
31570-04-4	87, 88	38444-76-7	3	51580-86-0	260	57837-19-1	56, 120	68194-14-9	5	74472-49-4	6
31710-30-2	20	38444-77-8	3	51630-58-1	54, 119	57966-95-7	50	68194-15-0	5	74472-50-7	6
31710-32-4	20	38444-78-9	3	51707-55-2	61	58200-66-1	21	68194-16-1	6	74472-51-8	6
31717-87-0	52	38444-81-4	3	51908-16-8	5	58200-70-7	21	68194-17-2	6	74472-52-9	6
31895-22-4	61	38444-84-7	3	52304-36-6	259	58769-20-3	56	68334-30-5	307	74472-53-0	6
31906-04-4	100, 102	38444-85-8	3	52315-07-8	50, 116, 258	58802-08-7	21	68359-37-5	50, 258	74474-43-8	5
31972-43-7	53	38444-86-9	3	52645-53-1	58, 122, 259	58802-09-8	21	68411-46-1	87, 88	74487-85-7	6
31972-44-8	53	38444-87-0	3	52663-58-8	4	58810-48-3	58	68412-48-6	88	74712-19-9	48
32598-10-0	4	38444-88-1	3	52663-59-9	4	59229-75-3	117, 82	68412-54-4	261	74782-23-3	58
32598-11-1	4	38444-90-5	3	52663-63-5	5	59291-64-4	5	68476-30-2	307	74845-58-2	40
32598-12-2	4	38444-93-8	4	52663-64-6	6	59291-65-5	5	68476-31-3	307	74992-96-4	23
32598-13-3	4	38727-55-8	52	52663-65-7	6						

CAS Number Index

77458-01-6	59	101007-06-1	47	131807-57-3	53	374726-62-2	56
77501-63-4	56	101200-48-0	62	131860-33-8	48	422556-08-9	60
77732-09-3	58	101205-02-1	50	131983-72-7	62	461642-78-4	90
78491-02-8	99, 258	101463-69-8	54, 259	133220-30-1	55	500008-45-7	49
78587-05-0	55	102783-82-4	94	134605-64-4	49	658066-35-4	54
79127-80-3	54, 119	102851-06-9	54, 119	135158-54-2	47	776297-69-9	80
79241-46-6	54, 119	103055-07-8	56	135319-73-2	53	796045-97-1	90
79270-78-3	52, 118	103361-09-7	54	135410-20-7	47, 257	847488-62-4	87
79277-27-3	61	104030-54-8	49	135590-91-9	56	865318-97-4	47
79538-32-2	61, 123	104040-78-0	54	136426-54-5	54	870196-80-8	90
79540-50-4	53	104040-79-1	50	137641-05-5	59	870196-83-1	90
79622-59-6	54	104086-16-0	18	137888-64-3	97	870532-86-8	90
79983-71-4	55	104086-18-2	18	138261-41-3	55, 259	881685-58-1	56
80060-09-9	51	104086-19-3	18	139528-85-1	57	907204-31-3	54
80380-39-8	94	104098-48-8	55	139968-49-3	56	950782-86-2	55
80844-07-1	53, 259	104206-82-8	56	140923-17-7	55	1015854-55-3	79
81334-34-1	55	105024-66-6	60	141112-29-0	56	1015854-62-2	79
81335-37-7	55	105512-06-9	50	141517-21-7	62		
81335-77-5	55, 65	105779-78-0	60	141776-32-1	60		
81405-85-8	55	107534-96-3	61, 123, 260	142022-58-0	77		
81406-37-3	54	108698-01-7	93	142022-59-1	77		
81741-28-8	260	108698-02-8	93	142022-61-5	77		
81777-89-1	50	108736-08-9	18	142459-58-3	54		
82097-50-5	62	109041-38-5	42	143390-89-0	56		
82239-20-1	, 19	110235-47-7	56	144171-61-9	55		
82291-37-0	21	110488-70-5	52	144550-36-7	55		
82306-65-8	21	110956-75-7	58	144651-06-9	58		
82469-79-2	90	111479-05-1	59	145701-21-9	52		
82558-50-7	56	111812-58-9	54	145701-23-1	54		
82560-54-1	48, 114	111872-58-3	55	147150-35-4	50		
82657-04-3	48, 257	111988-49-9	61	147411-69-6	60		
83055-99-6	48, 114	111991-09-4	57	148477-71-8	60		
83121-18-0	61	112204-35-0	82	149877-41-8	48		
83164-33-4	52	112226-61-6	55	149949-86-0	18		
83463-62-1	67, 115	112281-77-3	61	149949-87-1	18		
83547-96-0	68	112410-23-8	61	149949-88-2	18		
83657-22-1	63	113096-99-4	50	149949-89-3	18		
83657-24-3	52	113136-77-9	50	149949-90-6	18		
83844-21-7	40	113260-74-5	23	149961-52-4	52		
84087-01-4	60	113614-08-7	48	150114-71-9	47		
84332-86-5	50	113728-10-2	94	150304-08-8	17		
84496-56-0	50	114311-32-9	55	152477-96-8	71, 118		
84665-66-7	259	114369-43-6	53	153197-14-9	58		
84696-25-3	259	114420-56-3	50	153233-91-1	53		
84852-15-3	261	115044-19-4	55, 259	153310-30-6	18		
85380-74-1	74	115852-48-7	54	153719-23-4	61, 260		
85509-19-9	54	116255-48-2	49	154862-43-8	87		
85785-20-2	53	116714-46-6	58	155569-91-8	53		
86209-51-0	59	116806-76-9	18	156052-68-5	63		
86479-06-3	55, 259	116807-23-9	18	158062-67-0	54		
86598-92-7	55	116807-52-4	18	158076-63-2	17		
87130-20-9	52	116807-53-5	18	161050-58-4	57		
87392-12-9	57	116889-69-1	21	161326-34-7	53		
87405-27-4	261	116889-70-4	21	161922-37-8	56		
87546-18-7	54	117337-19-6	54	162650-77-3	53		
87674-68-8	52	117428-22-5	59	163515-14-8	52		
87820-88-0	62	117704-25-3	52	168316-95-8	60, 260		
88283-41-4	60	117718-60-2	61	173159-57-4	54		
88671-89-0	57, 121	118134-30-8	60	175013-18-0	59		
88678-67-5	60	118712-89-3	62, 260	177406-68-7	48		
90028-67-4	102	119168-77-3	61	178928-70-6	59		
90028-68-5	101, 102	119446-68-3	52	179101-81-6	60		
90035-08-8	259	119515-38-7	259	180409-60-3	50		
90717-03-6	60	120067-83-6	54, 119	181274-15-7	59		
90952-64-0	49, 65	120068-36-2	54, 119	181274-17-9	54		
90982-32-4	49, 116	120068-37-3	54, 119, 259	181587-01-9	53		
91465-08-6	50, 258	120116-88-3	50	183675-82-3	58		
93951-73-6	73, 116	120162-55-2	47	188425-85-6	48		
93951-75-8	73	120738-89-8	58	189084-64-8	89		
93951-87-2	79, 91	120923-37-7	47	189278-12-4	59		
93951-89-4	79, 91	120928-09-8	53	201611-85-0	90		
93952-07-9	308	121451-02-3	58	201611-92-9	90		
93952-11-5	79, 91	121552-61-2	50	203313-25-1	60		
93952-12-6	79, 91	121776-33-8	54, 259	207122-15-4	89		
93952-13-7	79, 91	122008-85-9	50	207122-16-5	89		
94125-34-5	59	122453-73-0	49, 258	207233-95-2	260		
94361-06-5	258	122548-33-8	55	208465-21-8	56		
94593-91-6	50	122836-35-5	60	210880-92-5	50, 258		
95266-40-3	62	122931-48-0	60	211519-85-6	89		
95465-99-9	49	123312-89-0	59	213464-77-8	58		
95617-09-7	54	123333-56-2	75, 99	219714-96-2	58		
95737-68-1	60, 260	123359-41-1	98	220899-03-6	57		
96182-53-5	61	124495-18-7	60	229977-93-9	54		
96489-71-3	60	125116-23-6	57	239110-15-7	54		
97676-35-2	98, 102	125225-28-7	55	243973-20-8	59		
97886-45-8	52	126535-15-7	62	272451-65-7	54		
98168-52-6	94	126801-58-9	53	283594-90-1	60		
98730-04-2	48	126833-17-8	53	335104-84-2	61		
98886-44-3	54	127277-53-6	59	337458-27-2	60		
98967-40-9	54	128639-02-1	49	348635-87-0	47		
99105-77-8	60	129188-99-4	92	358730-88-8	79, 91		
99129-21-2	50, 116	129322-83-4	72, 124	358730-89-9	79, 91		
99485-76-4	50	129630-19-9	59	358731-25-6	79, 91		
99607-70-2	50	129909-90-6	47	358731-29-0	79, 91		
99675-03-3	56	130000-40-7	61	361377-29-9	54		
100784-20-1	55	131341-86-1	54	365400-11-9	59		

Organic Analyte Index

Abamectin	47, 257	Ammeline	92	Bensulfuron-methyl	48, 114	Boscalid	48	tert-Butylbenzene	67, 115, 203, 221
Abate	47	Ammonium bromide	257	Bensulide	48, 115, 180	Botran	48, 115	Butyl benzyl phthalate	196
Accelerator BBTS	87	Ammonium dihydrogen phosphate	334	Bensultap		BPA	90	n-Butyl benzyl phthalate	80
Accelerator CBTS	87	Ammonium nitrate	334	Bentazon	48, 115, 180	Brodifacoum	48, 257	2-(4-tert-Butylbenzyl)propionaldehyde	98, 102
Accelerator EZ & EZ-SP	87	Ammonium picrate	82, 239	Bentazon methyl	48, 115	Bromacil	48, 115	Butyl cyclohexyl phthalate	80
Accelerator MBT, MBT/MG	87	Ammonium sulfamate	47	Benthiavalicarb-isopropyl	48	Bromadiolone	48, 258	Butylene glycol	98
Acenaphthene	39, 41, 114, 196, 236, 255	Ammonium sulfate	257	Ben[2a]anthracene	41, 115, 196, 236	Brominal	48, 115	n-Butyl isobutyl phthalate	80
Acenaphthene-d10	114, 160	n-Amylbenzene	67	Benzo[a]anthracene-7,12-dione	39	Bromkal™ DE-70-5	37	Butyl-methoxydibenzoylmethane	98, 103
Acenaphthylene	39, 41, 114, 196, 236, 255	Amyl cinnamal	98, 102	Benzo[a]anthracene-d12	115, 177	Bromkal™ DE-71	37	Butyl octyl phthalate	80
Acephate	47, 114	Amylcinnamyl alcohol	98, 102	Benzaldehyde-DNPH	71, 115	Bromkal™ DE-73-6	37	Butyl paraben	97, 98, 103
Acetaminophen	47	Ancymidol	47	Benzalkonium chloride (Tech)	257	Bromkal DE-70-5	29	2,6-Di-tert-butylphenol	87
Acetolactide	71, 114	Anilazine	47, 114	1,2-Benzanthracene	39	Bromkal DE-71	29	p-tert-Butylphenol	99, 102
Acetaldehyde-DNPH	71, 114, 164	Aniline	74, 114, 196	2,3-Benzanthracene	39	Bromkal DE-73-6	29	Di-n-butyl phthalate	99, 103, 118
2-Acetamidofluorene	43	Aniline-d5	74, 114, 177	Benzene	67, 115, 196, 203, 221	Bromkal™ DE-79-8	37	Di-n-butyl phthalate-d4	79, 91
Acetamidipropylurea	47, 257	Anisofos	47	Benzene-d6	67, 115, 175	2-Bromo-1-chloropropane	67, 115		
Acetochlor	47, 114	o-Anisidine	74, 106	Benzethonium chloride	257	2-Bromo-2-(bromomethyl)pentanedinitrile	258		
Acetone	72, 114, 196, 202	Anisyl alcohol	98, 102	Benazide	43, 75, 106, 115, 177, 230	1-Bromo-2-nitrobenzene	67, 115, 211, 217		
Acetone-DNPH	72, 114	Anox® PP18	87	1,2-Benzisothiazol-3(2H)-one	257	2-Bromo-2-nitropropane-1,3-diol	98, 258		
Acetonitrile	67, 114, 196, 202	Anthranthrene	39	Benzo[a]anthracene	255	4-Bromo-3,5-dimethylphenyl-N-methylcarbamate	115		
Acetophenone	72, 114, 196	Anthracene	39, 41, 114, 196, 236, 255	Benzo[a]pyrene	39, 41, 115, 196, 236, 255	4-Bromo-3,5-dimethylphenyl-N-methylcarbamate (BDMC)	159		
2-Acetylaminofluorene	114, 196	Anthracene-d10	114, 168, 177	Benzo[b]chrysene	39	2-Bromo-4,6-dinitroaniline	75		
2-Acetylpyridine	98	Antioxidant 60	87	Benzo[k]fluoranthene	39, 41, 115, 196, 236, 255	2-Bromo-4-(1,1,3,3-tetramethylbutyl)phenol	261		
Acibenzolar-S-methyl	47	Antioxidant S	87	Benzo[k]phenanthrene	39	2-Bromo-4-tert-octylphenol	261		
Acid Red 26	104	Antiozonant NIBUD	98	Benzo[k]pyrene	39	5-Bromo-5-nitro-1,3-dioxane	98		
Acid Violet 30	104	Aramite	47, 114, 196	Benzoflex® 2-45	90	Bromoacetic acid	77, 115, 162, 258		
Acid Violet 49	104	Aroclor 1016	16, 89, 138, 154, 177, 197, 207, 208, 226, 244, 297	1,2-Benzofluorene	39	2-Bromoallyl-2,4,6-tribromophenyl ether	37		
Acifluorfen	47, 114	Aroclor 1221	16, 89, 138, 177, 197, 207, 226, 244, 297	2,3-Benzofluorene	39	4-Bromonaniline	75		
Acifluorfen methyl ester	47, 114	Aroclor 1232	16, 89, 138, 177, 197, 207, 226, 244, 297	2,3-Benzofuran	39	2-Bromoanisole	35, 205		
Acionifen	47	Aroclor 1242	16, 89, 138, 177, 197, 207, 226, 244, 297	Benzoic acid	97, 115, 257	3-Bromoanisole	35, 205		
Acridine	39	Aroclor 1248	16, 89, 138, 177, 197, 207, 226, 244, 297	Benzo[k]fluoranthene	39	4-Bromoanisole	35, 115, 205		
Acrinathrin	47	Aroclor 1254	16, 89, 138, 177, 197, 207, 226, 244, 297	Benzo[k]fluoranthene-3	39, 41, 115, 196, 236, 255	Bromobenzene	67, 115, 203, 221		
Acrolein	71, 114, 196, 202	Aroclor 1260	16, 89, 138, 177, 197, 207, 226, 244, 297	5,6-Benzoquinoline	39	2-Bromobiphenyl	34, 115, 211		
Acrolein-DNPH	71, 114	Aroclor 1262	16, 89, 138, 177, 197, 207, 226, 244, 297	7,8-Benzoquinoline	39	3-Bromobiphenyl	34		
Acrylamide	67, 114, 166, 204	Aroclor 1254	16, 89, 138, 177, 197, 207, 226, 244, 297	Benzoximate	48	4-Bromobiphenyl	34		
Acyronitrile	67, 114, 196, 202, 204	Aroclor 1260	16, 89, 138, 177, 197, 207, 226, 244, 297	Benzoyloximate	48	2-Bromobutanoic acid	163		
Activator OT Urea	87	Aroclor 1262	16, 89, 138, 177, 197, 207, 226, 244, 297	Benzoylprop ethyl	48	Bromobutide	48		
Akrochem® Antiox 12	87	Aroclor 1268	16, 89, 138, 177, 197, 207, 226, 244, 297	Benzyol 2-ethylhexyl phthalate	80	Bromochloroacetic acid	77, 115, 162, 163		
Akrochem® Ceresin Wax	90			2-Benzyol 4-chlorophenol	257	Bromochloroacetone	67, 115		
Akrochem® Retarder BAX	90			Benzyol alcohol	71, 115, 102, 98	2-Bromochlorobenzene	67, 115, 175		
Akrofax A	91			Benzyol benzoate	115, 102, 98, 257	4-Bromochlorobenzene	67, 115, 202		
Akrofax B	91			Benzyol butyl phthalate	115, 78, 98, 103	Bromochlorodifluoromethane	115, 108		
Akroform ETU-22 PM	87			Benzyol chloride	67, 115	Bromochloromethane	67, 115, 175, 203		
Akrowax™ 195	88			Benzyol cinnamate	98, 102	Bromodichloroacetic acid	77, 115, 163		
Alachlor	47, 114			Benzyol cyanide	98, 102	Bromodichloromethane	115, 201, 203, 221, 222		
Alanap	47, 114			Benzyol paraben	98, 103	2-Bromodiphenyl ether	26		
Alanroot	98, 102			Benzyol salicylate	98, 102	3-Bromodiphenyl ether	26		
Alar	47			BHC Tech	48, 115	4-Bromodiphenyl ether	26		
Albendazole	47			α-BHC	48, 115, 196	Bromofenoxim	48		
Aldicarb	47, 114			β-BHC	115, 196	4-Bromofluorobenzene	175, 322		
Aldicarb sulfone	114			γ-BHC	120, 196	p-Bromofluorobenzene	67, 115, 127, 128, 129		
Aldicarb sulfoxide	47, 114			δ-BHC	115, 196		152, 161, 190, 224, 254, 307		
Aldrin	47, 64, 114, 196			Bifenazate	48	Bromofom	67, 115, 174, 196, 203, 221		
Alkanox® P27	87			Bifenox	48	Bromomethane	67, 115, 196, 203, 221		
Alkanox TBNAP	87			Bifenhrin	48, 115, 257	2-Bromophenol	35		
Allethrin	47, 114, 257			Binapacryl	48	3-Bromophenol	35, 205		
Allidochlor	47			2,2'-Binaphthyl	39	4-Bromophenol	35, 205		
Alloxydim-sodium	47			Bioallethrin	48	4-Bromophenyl phenyl ether	115, 196, 216		
Allyl alcohol	71, 114, 202			Biodiesel 100	307, 308	Bromophos-ethyl	48, 115		
Allyl chloride	67, 114, 196			Biodiesel 20	307, 308	Bromophos-methyl	48		
Allylthioisocyanate	98, 102			Biofuel 100	300, 304	2-Bromopropanoic acid	115, 162		
5-alpha Androstane	307, 313, 315, 316, 317, 321, 323			Biofuel 20	300, 304	Bromopropylate	48		
Amelotradin	47			Bioresmethrin	48	3-Bromostyrene	37		
Ametryn	47, 65, 114, 174			Biphenyl	39, 236	4-Bromostyrene	37		
Amicarbazone	47			2-Biphenylol sodium salt tetrahydrate	257	Bromotrifluoromethane	67, 115, 103, 108		
Amidosulfuron	47			Bisphenol A	90, 261	Bromotrifluoromethane	115, 103, 108		
4-Amino-2,6-dinitrotoluene	114, 82, 114, 239			Bisphenol A bis(diphenyl phosphate)	38	Bromoxynil-heptanoate	48		
2-Amino-3-nitrophenol	104, 106			Bisphenol A (BPA)	73	Bromoxynil methyl ether	48		
2-Amino-4,6-dinitrotoluene	114, 82, 239			Bisphenol A diglycidyl ether	92	Bromoxynil octanoate	49		
2-Amino-4-chlorophenol	104			Bisphenol AF	92	Bromuconazol	49		
1-Amino-4-nitronaphthalene	42			Bisphenol AP	92	Bueno	49, 115		
2-Amino-4-nitrotoluene	74, 106			Bisphenol B	92	Bupirimate	49		
2-Amino-5-(diethylamino)toluene monohydrochloride	104, 106			Bisphenol BP	92	Buprofezin	49		
				Bisphenol C	92	Busan	49		
2-Amino-7,8-dibromo-dibenzo-p-dioxin	23			Bisphenol C-dichloride	92	Busan (TCMTB)	258		
1-Aminoanthracene	43			Bisphenol E	92	Butachlor	49, 115		
2-Aminoanthracene	43			Bisphenol F	92	1,3-Butadiene	67, 115		
1-Aminoanthraquinone	43			Bisphenol G	92	Butafenacil	49		
2-Aminoanthraquinone	43			Bisphenol M	92	Butanal	71, 115		
p-Aminoazobenzene	74, 106			Bisphenol P	92	Butanal-DNPH	71, 115, 164		
o-Aminoazotoluene	74, 106			Bisphenol PH	92	1-Butanethiol	287		
2-Aminobiphenyl	43, 74, 106			Bisphenol S	92	(S)-(-)-1,2,4-Butanetriol	300, 304		
4-Aminobiphenyl	43, 74, 114, 115, 106			Bisphenol TMC	92	1-Butanol	71, 115, 202		
Aminocarb	47, 114, 179			Bisphenol Z	92	t-Butanol	71, 115, 202		
6-Aminochrysene	43			Bitertanol	48, 115	Butocarbomim	49		
2-Aminofluorene	43			Bithionol	98	Butocarbomim sulfoxide	49		
Aminomethylphosphonic acid	47			Bitrex	48	Butoxy carbomim	49		
Aminomethyl phosphonic acid (AMPA)	160			Bloc	48, 115	tris(2-butoxyethyl) phosphate	38		
1-Aminonaphthalene	43			BLS® 1622	87	bis(2-n-butoxyethyl)phthalate	78		
2-Aminonaphthalene	43			BLS® 1944	87	Butralin	49		
2-Aminophenol	104, 106			BLS® 232	87	Buturon	49		
Aminopyralid	47			BLS® 294	87	2,6-Di-tert-butyl-4-ethylphenol	87		
4-Aminopyridine	47, 114			BNX 1077	87	Butylate	49, 115, 256		
Amisulbrom	47			BNX 1225TPR	87	Butylated hydroxyanisole	98		
Amitraz	47			Bolstar	48, 115	Butylated hydroxytoluene	98		
Amitrole	47			Bonzi	48	n-Butylbenzene	67, 115, 203, 221		
Ammelide	92			Boric acid	257	sec-Butylbenzene	67, 115, 203, 221		

B

Balsam of Peru	98	Benzaldehyde	48, 114	Benzalkonium chloride	257	Benzalkonium chloride (Tech)	257	Benzene	67, 115, 196, 203, 221	Benzene-d6	67, 115, 175	Benzethonium chloride	257	Benzidine	43, 75, 106, 115, 177, 230	1,2-Benzisothiazol-3(2H)-one	257	Benzo[a]anthracene	255	Benzo[a]pyrene	39, 41, 115, 196, 236, 255	Benzo[b]chrysene	39	Benzo[k]fluoranthene	39, 41, 115, 196, 236, 255	Benzo[k]phenanthrene	39	Benzo[k]pyrene	39	Benzoflex® 2-45	90	1,2-Benzofluorene	39	2,3-Benzofluorene	39	2,3-Benzofuran	39	Benzoic acid	97, 115, 257	Benzo[k]fluoranthene	39	Benzo[k]fluoranthene-3	39, 41, 115, 196, 236, 255	Benzophenone-3	98, 103	5,6-Benzoquinoline	39	7,8-Benzoquinoline	39	Benzoximate	48	Benzoyloximate	48	Benzyol 2-ethylhexyl phthalate	80	2-Benzyol 4-chlorophenol	257	Benzyol alcohol	71, 115, 102, 98	Benzyol benzoate	115, 102, 98, 257	Benzyol butyl phthalate	115, 78, 98, 103	Benzyol chloride	67, 115	Benzyol cinnamate	98, 102	Benzyol cyanide	98, 102	Benzyol paraben	98, 103	Benzyol salicylate	98, 102	BHC Tech	48, 115	α-BHC	48, 115, 196	β-BHC	115, 196	γ-BHC	120, 196	δ-BHC	115, 196	Bifenazate	48	Bifenox	48	Bifenhrin	48, 115, 257	Binapacryl	48	2,2'-Binaphthyl	39	Bioallethrin	48	Biodiesel 100	307, 308	Biodiesel 20	307, 308	Biofuel 100	300, 304	Biofuel 20	300, 304	Bioresmethrin	48	Biphenyl	39, 236	2-Biphenylol sodium salt tetrahydrate	257	Bisphenol A	90, 261	Bisphenol A bis(diphenyl phosphate)	38	Bisphenol A (BPA)	73	Bisphenol A diglycidyl ether	92	Bisphenol AF	92	Bisphenol AP	92	Bisphenol B	92	Bisphenol BP	92	Bisphenol C	92	Bisphenol C-dichloride	92	Bisphenol E	92	Bisphenol F	92	Bisphenol G	92	Bisphenol M	92	Bisphenol P	92	Bisphenol PH	92	Bisphenol S	92	Bisphenol TMC	92	Bisphenol Z	92	Bitertanol	48, 115	Bithionol	98	Bitrex	48	Bloc	48, 115	BLS® 1622	87	BLS® 1944	87	BLS® 232	87	BNX 1077	87	BNX 1225TPR	87	Bolstar	48, 115	Bonzi	48	Boric acid	257																											
tert-Butylbenzene	67, 115, 203, 221	Butyl benzyl phthalate	196	n-Butyl benzyl phthalate	80	2-(4-tert-Butylbenzyl)propionaldehyde	98, 102	Butyl cyclohexyl phthalate	80	Butylene glycol	98	n-Butyl isobutyl phthalate	80	Butyl-methoxydibenzoylmethane	98, 103	Butyl octyl phthalate	80	Butyl paraben	97, 98, 103	2,6-Di-tert-butylphenol	87	p-tert-Butylphenol	99, 102	Di-n-butyl phthalate	99, 103, 118	Di-n-butyl phthalate-d4	79, 91																																																																																																																																																																											

Organic Analyte Index

2-Chloro-4-methylamino-6-diethylamino-s-triazine	49, 65	Citroflex A-2	90	2,4-D butyl ester	50	Dibehenin	94	2,2-Dichloro-1,1,1-trifluoroethane	118, 108
2-Chloro-4-methylamino-6-sec-butylamino-s-triazine	49, 65	Citroflex A-4	90	2,4-D ethyl ester	51, 116	Dibenz[a,h]acridine	39	1,2-Dichloro-1,1,2,2-tetrafluoroethane	118, 103, 108
2-Chloro-4-nitroaniline	75	Citroflex B-6	90	2,4-D ethylhexyl ester	51, 116	Dibenz[a,h]anthracene	41, 117, 196, 236, 255	2,6-Dichloro-1,4-benzoquinone	261
Chloroacetamide	99, 258	β-Citronellol	99, 102	2,4-D isobutyl ester	51	Dibenz[a,h]acridine	39	1,1-Dichloro-1-fluoroethane	118, 108
Chloroacetic acid	77, 116, 162	Clarity	50	2,4-D methyl ester	51, 64, 116	1,2,3,4-Dibenzanthracene	39	2,3-Dichloro-1-propene	68
2-Chloroacetophenone	72, 107	Clethodim	50, 116	2,4-D-PFB	117, 181, 219	1,2,5,6-Dibenzanthracene	39	1,1-Dichloro-1-propylene	69
2'-Chloroacetophenone	72, 107	Clofinafop	50	2,6-D acid	50, 116	Dibenz[a,h]fluoranthene	39	1,3-Dichloro-2-propanol	71
3'-Chloroacetophenone	72, 107	Clofinafop-propargyl	50	2,6-D methyl ester	51	Dibenz[a,h]pyrene	39	1,1-Dichloro-2-propanone	72, 118
4'-Chloroacetophenone	72, 107	Clofentazine	50	2,3-D acid	50	Dibenz[a,h]pyrene	39	tris(1,3-dichloro-2-propyl) phosphate	38
2-Chloroaniline	75	Clomazon	50	Dacthal	51, 116	Dibenz[a,h]pyrene	39	2,6-Dichloro-4-nitroaniline	75
3-Chloroaniline	75	Cloprop	50	Daimuron	51	7H-Dibenzo[c,g]carbazole	39	1,3-Dichloro-5,5-dimethylhydantoin	258
4-Chloroaniline	75, 106	Clopyralid methyl ester	50, 116	Dalapon	174, 219	Dibenzofuran	23, 117, 118	2,4-Dichloro-6-ethylamino-s-triazine	51, 65
p-Chloroaniline	116, 196	Cloquitocet-mexyl	50	Dalapon acid	51, 116, 163	Dibenzo-p-dioxin	21	Dichloroacetate	339
Chlorobenzene	67, 116, 196, 203, 221	Cloansulam methyl	50	Dalapon methyl ester	51, 117, 163	1,2,4,5-Dibenzopyrene	39	Dichloroacetic acid	77, 117, 162, 163
Chlorobenzene-d5	67	Clothianidin	50, 258	Dantol	51, 117	1,2,8,9-Dibenzpentaene	39	Dichloroacetonitrile	68, 117
Chlorobenzilate	49, 116, 196	Coal Tar	99	Dasanit	51, 117	Dibenzylhydroxylamine	87	3,4-Dichloroaniline	75
2-Chlorobiphenyl	3, 212	Copper dihydroxide	258	Dazomet	51, 117, 189, 258	Dibenzyl phthalate-d4	91	3,5-Dichloroaniline	5
3-Chlorobiphenyl	3	Copper (I) carbonate	50	2,4-DB	174, 219	Dibenzylphthalate-d4	79	2,4-Dichloroanisole	162
4-Chlorobiphenyl	3	Copper (II) carbonate basic	258	2,4-DB acid	51, 117	Diboron trioxide	258	2,6-Dichlorobenzamide	51
2-Chlorodibenzofuran	23	Copper (II) oxide	258	2,4-DB methyl ester	51, 117	1,2-Dibromo-1,1,2,2-tetrafluoroethane	68	1,2-Dichlorobenzene	68, 117, 203, 216, 221
4-Chlorodibenzofuran	23	Copper (II) sulfate	258	DCPA diacid	51, 117	2,5-Dibromo-1,4-benzoquinone	261	1,3-Dichlorobenzene	68, 117, 203, 216, 221
1-Chlorodibenzo-p-dioxin	21	Copper (II) oxide	258	p,p'-DDA	51, 117	2,2-Dibromo-2-cyanoacetamide	258	1,4-Dichlorobenzene	68, 117, 203, 216, 221
2-Chlorodibenzo-p-dioxin	21	Copper oxychloride	50	4,4'-DDD	196	2,6-Dibromo-3,5-dimethyl-1,4-benzoquinone	261	1,4-Dichlorobenzene-d4	68, 117
Chlorodibromooacetic acid	77, 116, 163	Copper thiocyanate	258	p,p'-DDD	51, 117	2,6-Dibromo-3-chloro-5-methyl-(1,4)benzoquinone	261	1,2-Dichlorobenzene-d4	68, 117, 175
Chlorodifluoromethane	116, 103, 108	Corn Oil	134, 240, 324, 341	p,p'-DDD	51, 117	1,2-Dibromo-3-chloropropane	68, 117, 196, 203, 221	m-Dichlorobenzene	196
Chloroethane	67, 116, 117, 103, 221, 108	Coronene	39	4,4'-DDE	196	1,2-Dibromo-4-(1,2-dibromoethyl)cyclohexane	36	o-Dichlorobenzene	196
2-Chloroethanol	50	Coumachlor	50	p,p'-DDE	51, 117	1,3-Dibromo-5,5-dimethylhydantoin	258	p-Dichlorobenzene	196
bis(2-Chloroethoxy)methane	116, 67, 196	Coumaphos	50, 116	4,4'-DDMU	117	2,3-Dibromo-5,6-dimethyl-1,4-benzoquinone	261	3,3'-Dichlorobenzidine	117, 118, 106
bis(2-Chloroethyl)ether	38, 77, 116, 196	Coumarin	99, 102	4,4'-DDMU	51	Dibromooacetic acid	77, 117, 162, 163	3,3'-Dichlorobenzidine	43, 75
tris(2-chloroethyl) phosphate	38	Coumatetralyl	50, 258	DDT, Tech	51, 117	Dibromooacetic acid methyl ester	162	3,5-Dichlorobenzoic acid	51, 117, 162
2-Chloroethylvinyl ether	77, 116, 170, 171, 200	4-CPA	50, 116	4,4'-DDT	196	Dibromooacetonitrile	68, 117	3,5-Dichlorobenzoic acid methyl ester	162
4-Chlorofluorobenzene	175	Cresolite from beechwood tar	258	p,p'-DDT	51, 117	2,3-Dibromoanisole	35, 205	4,4'-Dichlorobenzophenone	117
Chloroform	67, 116, 117, 196, 99, 221	p-Cresidine	75, 106	p,p'-DDT	51, 64, 117	2,4-Dibromoanisole	35, 205	4,4'-Dichlorobenzophenone	117
1-Chlorohexane	67, 116	m-Cresol	73, 116, 196, 258	DE-79 (Great Lakes)	29	2,5-Dibromoanisole	35, 205	2,4-Dichlorobenzyl alcohol	258
p-Chloro-m-cresol	196	o-Cresol	73, 116, 196	Decabromobiphenyl	34	2,6-Dibromoanisole	35, 205	2,2'-Dichlorobiphenyl	3
Chloromethane	67, 116, 117, 103, 221, 108	p-Cresol	73, 116, 196	Decabromodiphenyl ether	28, 89	3,5-Dibromoanisole	35, 205	2,3-Dichlorobiphenyl	212, 3
bis(Chloromethyl)ether	116	Cresyl diphenyl phosphate	38, 90	Decachlorobiphenyl	19, 117, 118, 148, 212, 212	2,2'-Dibromobiphenyl	34	2,3-Dichlorobiphenyl	3
1-Chloronaphthalene	19	Crimidine	50	2,2,3,3',4,4',5,5',6,6'-Decachlorobiphenyl	6	2,4-Dibromobiphenyl	34	2,4-Dichlorobiphenyl	3
2-Chloronaphthalene	116, 117, 19, 216	Crocein Scarlet 3b	104, 106	Decachlorodiphenyl ether	20	2,5-Dibromobiphenyl	34	2,5-Dichlorobiphenyl	3
Chloroneb	49	Crotonaldehyde	71, 116, 202	Decachlorobiphenyl	161	2,6-Dibromobiphenyl	34	2,6-Dichlorobiphenyl	3
2-Chloronitrobenzene	44	Crotonaldehyde-DNPH	71, 116, 164	Decafluorobiphenyl	20, 117, 118, 236	4,4'-Dibromobiphenyl	117, 149, 216	3,3'-Dichlorobiphenyl	3
4-Chloronitrobenzene	44	Cufomate	50, 116	Decafluorobiphenyl	20, 117, 118, 236	4,4'-Dibromobiphenyl	34, 33, 21	3,4-Dichlorobiphenyl	3
1-Chlorooctadecane	307, 317, 321	Cryolite	50	Decafluorotriphenylphosphine	15, 117, 135, 177, 179, 230	Dibromochloromethane	117, 196, 203, 221	3,4'-Dichlorobiphenyl	3
3-Chloro-o-tolidine	75, 106	Cumene	107	Decafluorotriphenylphosphine (DFTPP)	134, 136, 180	1,2-Dibromochloromethane	68	3,5-Dichlorobiphenyl	3
4-Chloro-o-tolidine	75, 106	Cumylurion	50	Decanal	71, 117	4,4'-Dibromodiphenyl ether	26	4,4'-Dichlorobiphenyl	3, 117, 148
Chloropentafluoroethane	116, 103, 108	Cure-Rite® IBT	87	Decanal-DNPH	71, 117, 164	2,2'-Dibromodiphenyl ether	26	Dichlorobromomethane	68
Chlorophacinone	49, 258	Cyanamide	258	Decanoic acid	258	2,3-Dichlorodiphenyl ether	26	1,4-Dichlorobutane	68, 117, 175
2-Chlorophenol	73, 116, 196	Cyanazine	50, 65, 116, 180	Declorane Plus Anti	34	2,3-Dibromodiphenyl ether	26	1,4-Dichlorobutane-d8	68
2-Chlorophenol-d4	73, 116, 177	Cyanide	339	Declorane Plus Syn	34	2,4-Dibromodiphenyl ether	26	2,8-Dichlorodibenzofuran	23
3-Chlorophenol	73	2-Cyano-2-propyl benzodithioate	90	Declorane Plus (Mixed isomers)	34, 38	2,4'-Dibromodiphenyl ether	26	2,3-Dichlorodibenzo-p-dioxin	21
4-Chlorophenol	73	4-Cyano-4-(phenylcarbonothiohythio)pentanoic acid	90	Decylbenzene	68	2,5-Dibromodiphenyl ether	26	1,3-Dichlorodibenzo-p-dioxin	21
o-Chlorophenol	73	Cyanofenophos	50	Decyl octyl phthalate	80	2,6-Dibromodiphenyl ether	26	1,4-Dichlorodibenzo-p-dioxin	21
2-Chlorophenyl-4-nitrophenyl ether	77, 216	Cyanomethyl dodecyl triithiocarbonate	90	Deet	51, 117	3,3-Dibromodiphenyl ether	26	1,6-Dichlorodibenzo-p-dioxin	21
3-Chlorophenyl-4-nitrophenyl ether	77, 216	Cyanophos	73	DEF	147	3,4-Dibromodiphenyl ether	26	2,3-Dichlorodibenzo-p-dioxin	21
4-Chlorophenyl-4-nitrophenyl ether	77, 216	Cyanox® 1212	87	DEF 6	51, 117	3,5-Dibromodiphenyl ether	26	2,7-Dichlorodibenzo-p-dioxin	21
1,1-bis(4-Chlorophenyl)ethylene	50	Cyanox® 2246	87	DEGDN	82, 239	1,2-Dibromoethane	68, 117, 196, 203, 221	2,8-Dichlorodibenzo-p-dioxin	21
4-Chlorophenyl methyl sulfonide	23	Cyanox 425	87	Dellamethrin	51, 117, 258	Dibromodifluoromethane	68, 117, 223	Dichlorodifluoromethane	68, 117, 118, 103, 221, 108
4-Chlorophenyl phenyl ether	20, 116, 117	Cyanox LTPD	87	Demeton	51	Dibromomethane	68, 117, 196, 203, 221	4,4'-Dichlorodiphenyl ether	20
Chlorpicrin	49, 116	Cyanox STDP	87	Demeton-S	51, 117	a,a-Dibromo-m-xylene	68, 117	1,1-Dichloroethane	68, 118, 196, 203, 221
Chloroprene	68, 116, 196, 201, 204, 220	Cyanuric acid	92	Demeton-S-methyl	51, 117	α,α-Dibromo-m-xylene	211	1,2-Dichloroethane	68, 118, 196, 203, 221
3-Chloropropionitrile	68	Cyazofamid	50	Demeton-S-methylsulfone	51	Dibromoneopentyl glycol	36	cis-1,2-Dichloroethane	68, 118, 203, 221
Chloropropylate	50, 116	Cyclanilide	65	Desethyl atrazine	65	4,4'-Dibromooctafluorobiphenyl	117, 150, 151, 218	1,1-Dichloroethylene	196
tris(2-chloropropyl)phosphate	38	Cycloate	50, 116	Desmethiazin	51	2,3-Dibromophenol	35, 205	Dichlorofluoromethane	68, 118, 103, 108
2-Chloropyridine	99	Cyclohexane	68	Desmetypr	51	2,4-Dibromophenol	35, 205, 206	Dichloromethane	68, 118, 196, 246
Chlorothalonil	50, 116, 258	Cyclohexanone	72, 116	DFTPP	117, 153, 157, 186, 189	2,5-Dibromophenol	35, 205	1,4-Dichloronaphthalene	19
2-Chlorotoluene	68, 116, 203, 221	Cyclohexanone-DNPH	72, 116, 164, 253	DFTTPO	117, 238	2,6-Dibromophenol	35, 205, 206	2,3-Dichloronitrobenzene	44, 51
3-Chlorotoluene	68	Cycloheximide	50	DFTTPO (Decafluorotriphenylphosphine oxide)	164	3,4-Dibromophenol	35, 205	2,4-Dichloronitrobenzene	44
4-Chlorotoluene	68, 116, 203, 221	2-Cylohexyl-4,6-dinitrophenol	73	Di(2-ethyl hexyl) phthalate	99, 103	3,5-Dibromophenol	35, 205	Dichlorophen	52, 118, 258
Chlorotoluron	258	Cyclopenta[c,d]pyrene	39	Di(2-ethylhexyl)tetra bromophthalate	36	2,4-Dibromophenol	35, 205	2,3-Dichlorophenol	73
Chlorotrifluoromethane	116, 103, 108	Cyclopate	50	Diablo 700X	38	2,5-Dibromophenol	35, 205	2,4-Dichlorophenol	73
Chlorowax™ 500C	38	N-Cyclopropyl-1,3,5-triazine-2,4,6-triamine	258	Diafenethuron	51	2,6-Dibromophenol	35, 205	2,5-Dichlorophenol	73, 118, 196
Chloroxuron	50	Cycloxydim	50	Dialfos	51	2,7-Dibromophenol	35, 205	3,4-Dichlorophenol	73
Chloropham	50, 116, 179	Cycuron	50	Diallate	51, 68, 117, 196	1,2-Dibromopropane	68, 117, 162, 164	3,5-Dichlorophenol	73
Chlorpyrifos	116	Cyflufenamide	50	Diallyl phthalate	78	2,3-Dibromopropionamide	204	2,6-Dichlorophenol	73
Chlorpyrifos-methyl	50, 116	Cyfluthrin	50, 258	2,6-Diamino-4-chloropyrimidine	92	2,3-Dibromopropionic acid	117, 162, 163	2,7-Dichlorophenol	73
Chlorpyrifos-oxon	50	Cyhalofop-butyl	50	2,6-Diamino-4-nitrotoluene	117, 82, 239	2,3-Dibromopropionic acid methyl ester	162	3,4-Dichlorophenol	73
Chlorosulfuron	50, 116	L-Cyhalothrin	258	2,4-Diamino-6-nitrotoluene	117, 82, 239	(2,3-Dibromopropyl)(2,4,6-tribromophenyl) ether	36	3,5-Dichlorophenol	73
Chlorthiamid	50	-Cyhalothrin	258	2,4-Diaminoanisole	248, 106	tris(2,3-Dibromopropyl) isocyanurate	36	2,3-Dichlorophenoxyacetic acid	118
Chlorthion	50	Cyhexatin	50	2,4-Diaminoanisole sulfate hydrate	75, 99	bis(2,3-Dibromopropyl) phosphate	38	3-(2,3-Dichlorophenyl)-1,1-dimethylurea	65
Chlorthiophos	50	p-Cymene	120	3,3'-Diaminobenzidine	43, 75	1,2-Dibromotetrafluorophosphate	117, 108	2,4-Dichlorophenyl-3-methyl-4-nitrophenyl ether	77, 216
Chlorzoluron	50	Cymoxanil	50	2,4-Diaminodiphenylamine	104, 106	2,5-Dibromotoluene	307, 318, 320	1-(3,4-Dichlorophenyl)-3-methylurea	52
Chlortalonate	50	Cypermethrin	50, 116, 258	4,4'-Diaminodiphenylmethane	106	Dibromsalon	99	2,3-Dichlorophenyl-4-nitrophenyl ether	77, 216
Chromate	335, 336	a-Cypermethrin	258	2,7-Diaminofluorene	43	Dibutylchlorandate	51, 117, 137, 185, 186	2,4-Dichlorophenyl-4-nitrophenyl ether	77, 216
Chromium	99, 103, 327, 331, 330, 332, 333, 375	Cyphenothrin	50, 258	1,8-Diaminonaphthalene	43	Dibutyl phthalate	78, 90	2,5-Dichlorophenyl-4-nitrophenyl ether	77, 216
Chrysene	39, 41, 116, 196, 236, 255	Cyprazine	50, 116	2,4-Diaminophenol	99	Dibutyl sebacate	90	2,6-Dichlorophenyl-4-nitrophenyl ether	77, 216
Chrysene-d12	15, 116, 180	Cyproconazole	50, 258	1,2-Diaminopropane	82, 239	Dicamba	51, 117, 174, 219	3,4-Dichlorophenyl-4-nitrophenyl ether	77, 216
Cinnamal	99, 102, 258	Cyprodinil	50	2,6-Diaminopyridine	104, 106	Dicamba methyl ester	51, 117	3,5-Dichlorophenyl-4-nitrophenyl ether	77, 216
Cinnamyl alcohol	99, 102	Cyproflumuron	50	2,4-Diaminotoluene	43, 75, 106	Dicaprin	94	2,4-Dichlorophenylacetic acid	77
Cinosulfuron	50	Cyromazine	50, 116	Diamyl phthalate	78, 99, 103	Dicaprylin	94	2,4-Dichlorophenylacetic acid	185
Ciodin	50			Diacichidin	94	Dichlofenthion	51, 117	2,4-Dichlorophenylacetic acid	51, 77, 118, 150
Citral	99, 102			Diazinon	51, 117, 258	Dichlofenibion	51, 117	2,4-Dichlorophenylacetic acid methyl ester	150, 219, 220
Citrate	335			Diazinon-o-analog	51	Dichlofluanid	51, 258		220
Citric acid	258			Diazodinitrophenol	82	Dichlone	51, 117		221
Citroflex® 2	90			Diazodilindyl urea	99, 258	Dichlormid	51, 117		220
Citroflex 4	90			Dibam	51				221

Organic Analyte Index

2,2-Dichloropropane	68, 118, 203, 221	Dimethenamid	52	Dinoseb methyl ether	52, 77, 118	Endrin	53, 64, 119, 146, 196	2-Ethylthiomethyl phenol	53
1,1-Dichloropropene	68, 118, 203, 221	Dimethenamide-P	52	Dinoterb	52	Endrin aldehyde	53, 119, 196	m-Ethyltoluene	69
1,3-Dichloropropene	68	Dimethipin	52	Diocetyl phthalate	90	Endrin ketone	53, 119	o-Ethyltoluene	69
1,3-Dichloropropene (cis/trans)	118	Dimethoate	52, 118, 196, 217	Diolein	94	Eosin Y	104	p-Ethyltoluene	69
cis-1,3-Dichloropropene	68, 118, 196, 203, 221	Dimethomorph	52	1,3-Diolein	300, 304	Epichlorohydrin	69, 166	Etobenzanid	53
1,3-Dichloropropylene	68	3,3'-Dimethoxybenzidine	106	Dioxacarb	52, 118	EPN	53, 119, 217	Etolenprox	53, 259
2,4-Dichlorotoluene	69	3,3'-Dimethoxybenzidine	43, 75	1,4-Dioxane	77, 99	Epoxiconazole	53	Etloxazole	53
Dichloroprop	52, 118, 174, 219	1,2-Dimethoxyethane	277, 285, 286	p-Dioxane	77, 118, 202	1,2-Epoxybutane	69	Etrifos	53
Dichloroprop methyl ester	52, 118	3,3'-Dimethoxybenzidine	228	Dioxathion	52, 118, 217	1,2-Epoxypropane	69	Eugenol	100, 102
Dichlorvos	52, 118, 258	N,N-Dimethyl-1,4-phenylenediamine	104, 106	1,4-Dioxino(2,3-b-5,6-b')dipyridine	23	EPTC	53		
2,4-Dichlorodiphenyl ether	20	2,3-Dimethyl-2,3-dinitrobutane	82, 239	Dipalmitin	94	Erbium	327, 331		
Diclobutrazol	52	2,3-Dimethyl-2,3-dinitrobutane (DMNB)	118	Dipalmitolein	94	Eriochrome Black A	104, 106		
Diclofop	52	1,3-Dimethyl-2-nitrobenzene	69, 118, 147	Dipentaerythritol hexanitrate	82	Erythritol tetranitrate (ETN)	82		
Diclofop methyl	52, 118	6,10-Dimethyl-3,5,9-undecatrien-2-one	99, 102	Dipetroselinin	94	Esfenvalerate	53, 258	Famoxadon	53
Diclosulam	52	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	106	Diphacinone	52	Esprocarb	53	Famphur	53, 119, 196, 217
o,p'-Dicofol	52	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	75	Diphenamid	52, 118	Etaconazole	53	Farnesol	100, 102
Dicrotophos	52, 118	Dimethyl adipate	90	Diphenoarsin-10-yl oxide	258	Ethaboxam	53	FD & C Blue 1	104
Dicyclohexyl phthalate	78, 99, 103	4-Dimethylaminoazobenzene	43, 75, 118	1,3-Diphenyl-2-thiourea	87	Ethalluralin	53, 119	FD & C Blue 2	104
Dicyclohexyl phthalate-3,4,5,6-d4	79, 91	p-(Dimethylamino)azobenzene	196	Diphenylamine	75, 85, 118, 119, 102, 99	Ethanedial dioxime	53	FD & C Red 3	104
1,3-Didecyl-2-methyl-1H-imidazolium chloride	258	2,6-Dimethylaniline	75	9,10-Diphenylanthracene	40	Ethanol	71, 119, 202, 312, 322, 558	FD & C Red 40	104
Didecylmethylammonium chloride	258	2,3-Dimethylantracene	39	Diphenylenesulfide	39	Ethanox® 310	87	FD & C Yellow 5	104
Didecyl phthalate (Tech Mix)	80	9,10-Dimethylantracene	39	1,2-Diphenylhydrazine	43	Ethanox® 314	87	Fenamidone	53
Didodecyl phthalate	78	Dimethylarsinic acid	52	Diphenyl isophthalate	78	Ethanox 323	87	Fenaminosulf	53, 119
Diecosadenoin	94	3,9-Dimethylbenz[a]anthracene	39	Diphenyl phthalate	78	Ethanox 330	87	Fenamiphos	53, 119
Diecosenoin	94	6,8-Dimethylbenz[a]anthracene	39	Diphenyl sulfide	287	Ethanox 376	87	Fenamiphos sulfone	53
Dieldrin	52, 64, 118, 196	7,12-Dimethylbenz[a]anthracene	39, 118, 196	Dipotassium disulfite	258	Ethanox 702	87	Fenamiphos sulfoxide	53
1,2,3,4-Diepoxybutane	69	2,5-Dimethylbenzaldehyde-DNPH	71, 118	Diopropetryn	52	Ethanox 703	88	Fenatrol	53
Diesel	307	3,3'-Dimethylbenzidine	118, 119, 106	Diquat	166	Ethanox® 703	88	Fenazaquin	53
#1 Diesel	307, 308	3,3'-Dimethylbenzidine	75	Diquat dibromide monohydrate	52, 118	Ethaphos® 368	88	Fenbutonazole	53
#2 Diesel	307, 308, 309, 314, 315	7,10-Dimethylbenzo[a]pyrene	39	Direct Black 38	104, 106	Ethephon	53, 119	Fenbutatin oxide	53
Diethanolamine	99	1,12-Dimethylbenzo[c]phenanthrene	39	Direct Blue 6	104, 106	Ethidimuron	53	Fenturam	53
Diethylamine	52	5,8-Dimethylbenzo[c]phenanthrene	39	Direct Red 28	104	Ethiofencarb	53	Fenhexamid	53
Diethyl ethyl	52	Dimethyl citraconate	99, 102	Disflamol® TKP	90	Ethiofencarb sulfone	53	Fenitrothion	53, 119, 259
Ethiofencarb	52	Dimethyl endothall	160	Dislamol® TP	90	Ethiofencarb sulfone	53	Fenothiocarb	54
N,N-Diethyl-1,4-phenylenediamine Sulfate	106	Dimethyl isophthalate	78	Disilver oxide	258	Ethiofencarb sulfoxide	53	Fenoxanil	54
1,4-Diethyl benzene	291, 292, 293	1,2-Dimethylnaphthalene	39	Disperse Blue 1	104, 106	Ethiolat	53	Fenoxaprop	54
1,4-Diethylbenzene	69, 288, 289	1,3-Dimethylnaphthalene	39	Disperse Blue 102	104, 106	Ethion	53, 119, 217	Fenoxaprop-ethyl	54, 119
m-Diethylbenzene	69	1,4-Dimethylnaphthalene	39	Disperse Blue 124	104, 106	Ethiozin	53	Fenoxaprop-p-ethyl	54
o-Diethylbenzene	69	1,5-Dimethylnaphthalene	39	Disperse Blue 26	104, 106	Ethiprole	53	Fenoxycarb	54, 119, 259
Diethyl disulfide	287	1,6-Dimethylnaphthalene	39	Disperse Blue 3	104, 106	Ethirmol	53	Fenpropidin	54
Diethylene glycol monohexyl ether	194	1,8-Dimethylnaphthalene	39	Disperse Blue 35	104, 106	Ethofumesate	53	Fenpropimorph	54, 259
Diethyl ether	77, 118, 202	2,6-Dimethylnaphthalene	39	Disperse Blue 37	104, 106	Ethoprop	53, 119	Fenpyroximate	54
Diethyl maleate	99, 102	2,7-Dimethylnaphthalene	39	Disperse Brown 1	104	2-Ethoxyethanol	99	Fenson	54
N,N-Diethyl-m-tolamide (DEET, OFF)	258	Dimethylolacetaldehyde(3-(trimethoxysilyl)propyl ammonium chloride)	258	Disperse Orange 1	104, 106	2-Ethoxyethanol acetate	99	Fensulthion	119
Diethyl phosphate	38, 52, 118	4,4-Dimethyloxazolidine	258	Disperse Orange 11	104, 106	bis(2-Ethoxyethyl)phthalate	78	Fenthion	54, 119
Diethylphosphate	52	3,6-Dimethylphenanthrene	40	Disperse Orange 3	104, 106	Ethoxyquin	53	Fenthion-sulfone	54
Diethyl phthalate	118, 78, 99, 103	a,a-Dimethylphenethylamine	75, 118, 196	Disperse Orange 37	104, 106	Ethoxysulfuron	53	Fenthion sulfoxide	54
Diethyl phthalate-3,4,5,6-d4	79, 91	2,4-Dimethylphenol	73, 118, 196	Disperse Red 1	104, 106	5-Ethyl-1-aza-3,7-dioxabicyclo[3.3.0]octane	258	Fentin acetate	54
Diethyl sulfide	287	2,4-Dimethylphenol-3,5,6-d3	73	Disperse Red 11	104, 106	Ethyl acetate	69, 119, 202	Fentin hydroxide	54
N,N-Diethylthiourea	87	N-(2,4-Dimethylphenyl)formamide	52	Disperse Red 17	104, 106	2,4-bis(Ethylamino)-6-diethylamino-s-triazine	65	Fenuron	54, 119, 179
Difenacoum	52, 258	Dimethyl phosphate	38, 52, 118	Disperse Yellow 1	104	Ethyl arachidate	97, 305	Fenuron-TCA	119
Difenoconazole	52	Dimethyl phthalate	118, 78, 99, 103	Disperse Yellow 3	104, 106	Ethyl behenate	97, 305	Fenuron-TCA	54, 179
Difenzoxuron	52	Dimethyl phthalate-3,4,5,6-d4	79, 91	Disperse Yellow 9	104, 106	Ethyl benzene	69, 119, 196, 203, 221	Fenvalerate	54, 119
Diflubenzuron	52, 258	Dimethyl sebacate	90	Distearyl	94	Ethylbenzene-d10	69, 119, 175	Ferbam	54, 119
Diflufenican	52	Dimethyl sulfate	69	Distyryl biphenyl	87	Ethylbenzene-d10	69, 119, 175	Fipronil	54, 119, 259
4',6-Difluoro-2,2',3,3',4,5,5',6'-octabromodiphenyl ether	33	Dimethylvinphos (Z type)	52	Disulfoton	52, 118, 196	Ethyl caprate	97, 305	Fipronil desulfinyl	54
5,6-Difluoro-2,2',3,4,4',5-pentabromodiphenyl ether	33	Dimetilan	52	Disulfoton sulfone	52, 118	Ethyl caprylate	97, 305	Fipronil sulfide	54, 119
3,6-Difluoro-2,2',4,4',5-pentabromodiphenyl ether	33	Dimoxystrobin	52	Disulfoton sulfoxide	52	Ethyl caprylate	97, 305	Fipronil sulfone	54, 119
5,5'-Difluoro-2,2',4,4'-tetrabromodiphenyl ether	33	Dimyristin	94	Disul-sodium salt	52	Ethyl carbamate	53, 119	Firemaster™ 2100	37
3,5-Difluoro-2,3,4,4',6-pentabromodiphenyl ether	33	Dimyristolein	94	Ditalmols	52	Ethyl centralite	85	Firemaster™ 680	37
1,4-Difluorobenzene	69, 118, 175	Dinex	52, 118, 233	Dithianon	52	6-Ethylchrysene	80	Firemaster BP4A	89
2,2-Difluorobiphenyl	118	Diconazole	52	2,2-Dithiobis(pyridine-N-oxide)	258	Ethylene diamine	75	Firemaster™ BP4A	37
2,2-Difluorobiphenyl	20, 186, 189	Dinitramine	52	Dithiopyr	52	Ethylene diamine dihydrochloride	99	Firemaster™ BP-6	37
4,4-Difluorobiphenyl	118, 160	2,7-Dinitro-9-fluorenone	52	Dithiothreitol (DTT)	149	Ethylene glycol	69, 71, 119, 202, 276	Firemaster™ PHT4	37
1,1-Difluoroethane	118, 103, 108	2,4-Dinitroaniline	75	Diundecyl phthalate	78	Ethylene oxide	69, 119, 202, 220, 222, 259	Firemaster™ T23P	37
Dihexyl phthalate	78	3,5-Dinitroaniline	118, 82, 239	Diuron (Karmex)	179, 258	Ethylene thiourea	53, 149, 166	Flamprop-methyl	54, 119
2,3-Dihydro-2,2-dimethylbenzofuran-7-ol	52	9,10-Dinitroanthracene	39	Divaconin	94	Ethyl erucate	97, 305	Flazasulfuron	54
12,12A-Dihydro-3,9-dimethylbenz[a]anthracene	39	1,2-Dinitrobenzene	82, 118, 240	DMNB	82	Ethyl heptadecanoate	97, 305	Flocumafen	259
Dihydroxybutyl alcohol	100, 102	1,3-Dinitrobenzene	69, 118, 239, 82, 239	DMST	52	Ethyl hexanediol	53	Flonicamid	54
9,10-Dihydroanthracene	39	m-Dinitrobenzene	196	Docosane	278, 307	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate	36	Florasulam	54
Dihydrocoumarin	99, 102	3,5-Dinitrobenzyl chloride	194	n-Dodecane	307	bis(2-Ethylhexyl)adipate	53, 119	Fluacrypyrim	54
4,6-Dihydroxy-2,2',4',6'-tetrachlorobiphenyl	17	2,2'-Dinitrophenyl	42, 44	Dodecylbenzene	69	2-Ethylhexyl diphenyl phosphate	119	Fluazifop butyl	119
4,4'-Dihydroxy-2,2',6,6'-tetrachlorobiphenyl	17	2,8-Dinitrophenylthiophene	42	bis(dodecylsulfanylthiocarbonyl) disulfide	90	tris(2-Ethylhexyl) phosphate	38	Fluazifop-butyl	54
2,2'-Dihydroxy-biphenyl	18	2,7-Dinitrofluorene	42	Dodemorph acetate	52	bis(2-Ethylhexyl)phthalate-3,4,5,6-d4	119, 78, 196	Fluazifop-p-butyl	54, 119
2,5-Dihydroxy-biphenyl	18	1,2-Dinitroglycerin	82, 239	Dodone	52	bis(2-Ethylhexyl)phthalate-3,4,5,6-d4	91	Fluazimam	54
4,4'-Dihydroxy-biphenyl	18	1,3-Dinitroglycerin	82, 239	Dolomite	52	bis(2-Ethylhexyl)phthalate-3,4,5,6-d4	79	Flubendiamide	54
Diindenol[1,2,3-cd:1',2',3'-lm]perylene	39	1,3-Dinitronaphthalene	42	Doramectin	52	2-Ethylhexyl salicylate	100	Flucarbazono-sodium	54
Diisobutyl phthalate	78	1,5-Dinitronaphthalene	42	Dow FR-250	37	2-Ethylhexyl sebacate	90	Fluchloralin	54, 119
Di-iso-butyl phthalate-3,4,5,6-d4	79, 91	1,8-Dinitronaphthalene	42	2,4-DP ethyl hexyl	52, 118	Bis(2-Ethylhexyl) terephthalate	90	Fluthrinatre	54
Diisodecyl phthalate	80, 99, 103	4,6-Dinitro-o-cresol	42, 52, 118, 196	DSMA	53	2-Ethylimidazole	92	Flutocoxonil	54
Diisooctyl phthalate	80	4,6-Dinitro-o-toluidine	23	Dursban	53, 119	Ethyl laureate	97, 305	Flufenacet	54
Diisohexyl phthalate	80	2,4-Dinitrophenol	42, 44, 73, 118, 196	Dyfonate	53, 119	Ethyl lignocerate	97, 305	Flufenoxuron	54, 259
Diisononyl phthalate	99, 103	2,4-Dinitrophenylhydrazine	118			Ethyl linoleate	97, 305	Flumetralin	54
Diisononyl phthalate (C8 to C10 isomers)	80	2,4-Dinitrophenylhydrazine (DNPH)	191			Ethyl linolenate gamma	97, 305	Flumetsulam	54
Diisooctyl phthalate	90, 99, 103	1,3-Dinitropropene	42			Ethyl mercaptan	87	Flumiclorac-pentyl	54
Diisooctyl phthalate (C8 isomers)	80	1,6-Dinitropropene	42	Edifenphos	53	Ethyl methacrylate	69, 119, 196	Flumioxazin	54
Diisopentyl phthalate	78	1,8-Dinitropropene	42	EGDN	119, 82, 239	Ethyl methanesulfonate	69, 119	Flumeturon	119, 120, 54, 259
Diisopropyl phthalate	78	2,4-Dinitrotoluene	42, 44, 118, 119, 82, 239	Emamectin-benzoate	53	Ethyl methanesulfonate	196	Flupicolide	54
Dilaun	94	2,5-Dinitrotoluene	69, 84, 118, 215	Empenthrin	53, 258	Ethyl methyl sulfide	287	Flupyrrom	54
Dilnolein	94	2,6-Dinitrotoluene	42, 44, 82, 118, 119, 239	Endosulfan I	53, 119, 160, 196	Ethyl myristate	97, 305	Fluoranthene	39, 40, 119, 196, 236, 255
Dilnolenin	94	3,4-Dinitrotoluene	69, 82, 83, 84, 118, 215	Endosulfan II	53, 119, 196	Ethyl nervonate	97, 305	Fluorene	39, 40, 119, 196, 236, 255
Dimetfox	52, 118	3,5-Dinitrotoluene	82, 239	Endosulfan sulfate	53, 119, 196	Ethyl oleate	97, 305	4-Fluoro-2,2',3,3',4,5,5',6,6'-nonabromodiphenyl ether	33
Dimetfuron	52	Dinocap	52, 118	Endothall	53, 119, 160, 166	Ethyl palmitate	97, 305	5-Fluoro-2,2',3,4,4',5,6'-heptabromodiphenyl ether	33
Dimexap	52	Diinonyl phthalate	80	Endothall dimethyl ester	53, 119	Ethyl palmitoleate	97, 305	5-Fluoro-2,2',3,4,4',5,5'-hexabromodiphenyl ether	33
Dimetpiperate	52	Dinoseb	52, 118, 174, 196, 219	Endothall pentafluorophenyl	119	Ethyl paraben	97, 99, 103	3-Fluoro-2,2',4,4',5,6'-hexabromodiphenyl ether	33
Dimethachlor	52	Dinoseb acetate	52	Endothall pentafluorophenyl hydrazine derivative	160	Ethyl parathion	217	6-Fluoro-2,2',4,4',5-pentabromodiphenyl ether	33
						Ethyl stearate	97, 305	3-Fluoro-2,2',4,4',6-pentabromodiphenyl ether	33

Organic Analyte Index

4-Fluoro-2,2',4,4'-tetrabromodiphenyl ether	33	Geosmin	107	Hexabromobenzene	37	2,3,3',4',5,6-Hexachlorobiphenyl	5	4'-Hydroxy-2,3,4,6-tetrabromodiphenyl ether	31
4-Fluoro-2,3',4,5,6-hexabromodiphenyl ether	33	Geraniol	100, 102, 259	2,2,3,4,4',5-Hexabromobiphenyl	34	2,3,3',5,5',6-Hexachlorobiphenyl	5	5-Hydroxy-2,3,4,6-tetrabromodiphenyl ether	31
5-Fluoro-2,3',4,4',5-pentabromodiphenyl ether	33	Germanium	328, 331	2,2,3,4,4',5-Hexabromobiphenyl	34	2,3,4',5,6-Hexachlorobiphenyl	5	5-Hydroxy-2,3,4,6-tetrabromodiphenyl ether	31
6-Fluoro-2,3',4,4',5-pentabromodiphenyl ether	33	Gesalumin	55, 65	2,2,4,4',5,5'-Hexabromobiphenyl	34	2,3',4',5,5'-Hexachlorobiphenyl	5	2-Hydroxy-2,4,4'-tribromodiphenyl ether	31
4-Fluoro-2,3,4,5-tetrabromodiphenyl ether	33	Gluconate, ammonium salt	55	2,2,4,4',6,6'-Hexabromobiphenyl	34	2,3,4',4',5,6-Hexachlorobiphenyl	5	3-Hydroxy-2,4,4'-tribromodiphenyl ether	31
4-Fluoro-2,3',4,6-tetrabromodiphenyl ether	33	Glutaraldehyde	259	2,3,3',4,4',5-Hexabromobiphenyl	34	3,3',4',4',5,5'-Hexachlorobiphenyl	5	3-Hydroxy-2,4,5-tribromodiphenyl ether	31
3-Fluoro-2,3,4,4',5-tetrabromodiphenyl ether	33	Glycerin	300, 304	2,3,3',4,5,5'-Hexabromobiphenyl	34	Hexachlorobutadiene	38, 69, 120, 196, 203, 216, 221	3-Hydroxy-2,4,6-tribromodiphenyl ether	31
4-Fluoro-2,3,4,5-pentabromodiphenyl ether	33	Glycolate	335	2,3,3',4,4',5,5'-Hexabromobiphenyl	34	Hexachlorocyclopentadiene	69, 120, 196, 216	4-Hydroxy-2,3,4,6-tetrabromodiphenyl ether	31
4-Fluoro-2,3,4,6-pentabromodiphenyl ether	33	Glycolic acid	259	α -Hexabromocyclododecane	34	Hexachlorocyclopentadienyl-dibromocyclooctane	36	2-Hydroxy-2,4,6-dibromodiphenyl ether	31
2-Fluoro-2,4,4'-tribromodiphenyl ether	33	Glycin	55	β -Hexabromocyclododecane	34	1,2,3,4,7,8-Hexachlorodibenzofuran	23	3-Hydroxy-2,4,6-dibromodiphenyl ether	31
3-Fluoro-2,4,4'-tribromodiphenyl ether	33	Glyphosate	55, 119, 160, 166	γ -Hexabromocyclododecane	34	1,2,3,4,6,7-Hexachlorodibenzo-p-dioxin	21	2-Hydroxy-2,5-dibromodiphenyl ether	31
3-Fluoro-2,4,6-dibromodiphenyl ether	33	Guandine nitrate	119, 82, 239	2,2',3',3',4,4'-Hexabromodiphenyl ether	27	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	21	4-Hydroxy-2,3,3',4',5,5'-hexachlorobiphenyl	17
3-Fluoro-2,3,4,5,5'-pentabromodiphenyl ether	33	Guazatine acetate	55	2,2',3',3',4,4'-Hexabromodiphenyl ether	27	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	21	4-Hydroxy-2,3,3',4',5'-pentachlorobiphenyl	17
5-Fluoro-3,3',4,4',5-pentabromodiphenyl ether	33	Guazatine acetate (Tech)	259	2,2',3',3',4,5'-Hexabromodiphenyl ether	27	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	21	4-Hydroxy-2,3,3',5,5',6'-hexachlorobiphenyl	17
5-Fluoro-3,3',4,4',5-pentabromodiphenyl ether	33			2,2',3',3',4,6'-Hexabromodiphenyl ether	27	1,2,4,6,7,9,11,2,4,6,8,9-Hexachlorodibenzo-p-dioxin	21	4-Hydroxy-2,3,3',5,6'-pentachlorobiphenyl	17
3-Fluoro-3,4-dibromodiphenyl ether	33			2,2',3',3',4,6'-Hexabromodiphenyl ether	27	Hexachloroethane	69, 120, 196, 216	6-Hydroxy-2,3,3',4,4',5-pentabromodiphenyl ether	31
4-Fluoro-4,4-dibromodiphenyl ether	33			2,2',3',3',5,5'-Hexabromodiphenyl ether	27	Hexachlorophene	69, 120, 121, 100	4-Hydroxy-2,3,4,5,6'-pentachlorobiphenyl	17
2-Fluoro-4-bromodiphenyl ether	33	Halofenprox	55	2,2',3',3',5,6'-Hexabromodiphenyl ether	27	Hexachloropropene	69, 120, 196	2-Hydroxy-2,3,4,5,6'-pentachlorobiphenyl	17
2-Fluoroacetamide	69	Halofenoxazole	55	2,2',3',3',5,6'-Hexabromodiphenyl ether	27	Hexacetonazole	55	4-Hydroxy-2,3,4,6'-tetrachlorobiphenyl	17
4-Fluorobenzene	69, 119, 144, 145, 152, 175, 199	Halosulfuron methyl	55	2,2',3',3',6,6'-Hexabromodiphenyl ether	27	Hexadecylbenzene	69	4-Hydroxy-2,3,5,5'-tetrachlorobiphenyl	17
2-Fluorobenzene	119, 120, 20	Halowax 1013	19, 20, 89	2,2',3',4,5,5'-Hexabromodiphenyl ether	27	Hexafluorurane	55, 259	2-Hydroxy-2,3,5,6'-tetrachlorobiphenyl	17
1-Fluorobenzene	119, 120, 20	Halowax 1014	19, 20, 89	2,2',3',4,4',5'-Hexabromodiphenyl ether	27	Hexahydro-1,3,5-tris(hydroxyethyl)triazine	259	4-Hydroxy-2,3,3'-trichlorobiphenyl	17
2-Fluorobenzene	119, 120, 20	Halowax 1051	19, 20, 89	2,2',3',4,4',6'-Hexabromodiphenyl ether	27	Hexahydro-1,3-trinitro-1,3,5-triazine	82	2-Hydroxy-2,3,3',4',5,5'-pentachlorobiphenyl	17
2-Fluorobenzene	119, 120, 20	Halowax 1099	19, 20, 89	2,2',3',4,4',6'-Hexabromodiphenyl ether	27	Hexamethylene diisocyanate	296	2-Hydroxy-2,3,3',4',5'-tetrachlorobiphenyl	17
2-Fluorobenzene	119, 120, 20	Haloxypol	55, 119	2,2',3',4,4',6'-Hexabromodiphenyl ether	27	Hexamethylene diperoxide diamine	82, 239	3-Hydroxy-2,3,3',4',5'-tetrachlorobiphenyl	17
2-Fluorobenzene	119, 120, 20	Haloxypol-methyl	55, 119	2,2',3',4,4',6'-Hexabromodiphenyl ether	27	Hexamethylenetriperoxide diamine	82, 239	4-Hydroxy-2,3,3',4',5'-tetrachlorobiphenyl	17
Fluorotrichloromethane	69	1,2,3,4,7,8-HCDD	197	2,2',3',4,5,5'-Hexabromodiphenyl ether	27	Hexamethylphosphoramide	55	2-Hydroxy-2,3,3',5,5',6'-pentachlorobiphenyl	17
Fluoxastrobin	54	1,2,3,4,7,8-HCDD	197	2,2',3',4,5,6-Hexabromodiphenyl ether	27	Hexanal	72, 120	2-Hydroxy-2,3,3',5,6'-tetrachlorobiphenyl	17
Fluquinonazole	54	2,2,3,4,4',5,5'-Heptabromobiphenyl	34	2,2',3',4,6,6-Hexabromodiphenyl ether	27	Hexanal-DNPH	72, 120, 164	3-Hydroxy-2,3,3',5,6'-tetrachlorobiphenyl	17
Flurenol methyl ester	54, 119	2,3,3',4,4',5,5'-Heptabromobiphenyl	34	2,2',3',4,5,5'-Hexabromodiphenyl ether	27	Hexanitrodiphenylamine	82, 239	4-Hydroxy-2,3,3',5,6'-tetrachlorobiphenyl	17
Fluridone	54, 119	2,2',3',4,5,5'-Heptabromodiphenyl ether	28	2,2',3',4,5,6-Hexabromodiphenyl ether	27	Hexanitrostilbene	82, 239	2-Hydroxy-2,3,3',4',5'-tetrachlorobiphenyl	17
Flurochloridone	54	2,2',3',3',4,4',5-Hexabromodiphenyl ether	28	2,2',3',4,5,6-Hexabromodiphenyl ether	27	2-Hexanone	72, 120, 196, 283	2-Hydroxy-2,2',4',6'-trichlorobiphenyl	17
Flurofenox	54	2,2',3',3',4,4',6-Hexabromodiphenyl ether	28	2,2',3',4,5,6-Hexabromodiphenyl ether	27	Hexazone	55, 120	3-Hydroxy-2,2',4',6'-trichlorobiphenyl	17
Fluroxypyr	54	2,2',3',3',4,5,5'-Heptabromodiphenyl ether	28	2,2',3',4,6,6-Hexabromodiphenyl ether	27	cis-3-Hexen-1-ol	107	4-Hydroxy-2,2',4',6'-trichlorobiphenyl	17
Fluroxypyr-1-methylheptyl ester	54	2,2',3',3',4,5,6-Hexabromodiphenyl ether	28	2,2',3',5,5,6-Hexabromodiphenyl ether	28	cis-3-Hexenyl acetate	107	2-Hydroxy-2,2',4',6'-trichlorobiphenyl	17
Flurprimidol	54	2,2',3',3',4,5,6'-Heptabromodiphenyl ether	28	2,2',3',5,6,6-Hexabromodiphenyl ether	28	Hexyl-2-ethylhexyl phthalate (Tech Mix)	80	2-Hydroxy-2,2',5'-trichlorobiphenyl	17
Flusizaloe	54	2,2',3',3',4,5,6-Hexabromodiphenyl ether	28	2,2',4,4',5,5'-Hexabromodiphenyl ether	89	Hexylbenzene	69	2-Hydroxy-2,2',5'-dichlorobiphenyl	17
Fluthiacet-methyl	54	2,2',3',3',4',5,6-Heptabromodiphenyl ether	28	2,2',4,4',5,5'-Hexabromodiphenyl ether	28	Hexyl cinnamaldehyde	100, 102	4-Hydroxy-2,2',5'-dichlorobiphenyl	17
Flutolanil	54	2,2',3',3',4,6,6'-Heptabromodiphenyl ether	28	2,2',4,4',5,6-Hexabromodiphenyl ether	89	Di-hexyl phthalate	99, 103	4-Hydroxy-2,2'-dichlorobiphenyl	17
Flutrafal	54	2,2',3',3',5,5,6-Hexabromodiphenyl ether	28	2,2',4,4',5,6-Hexabromodiphenyl ether	28	Di-n-hexyl phthalate-3,4,5,6-d4	79, 91	4-Hydroxy-2-chlorobiphenyl	17
Fluxapyroxad	54	2,2',3',3',5,6,6'-Heptabromodiphenyl ether	28	2,2',4,4',6,6-Hexabromodiphenyl ether	28	Hexythiazox	55	4-Hydroxy-3,3',4',5'-tetrachlorobiphenyl	17
Folpet	54, 119, 259	2,2',3',4,4',5,5'-Heptabromodiphenyl ether	28	2,3,3',4,4',5-Hexabromodiphenyl ether	28	Hi-Point® PD-1	90	4-Hydroxy-3,5-dichlorobiphenyl	17
Fomesafen	54	2,2',3',4,4',5,6-Heptabromodiphenyl ether	28, 29	2,3,3',4,4',5-Hexabromodiphenyl ether	28	HMTD	82, 239	2-Hydroxy-3,4'-dichlorobiphenyl	17
Food Yellow 3	105	2,2',3',4,4',5,6-Heptabromodiphenyl ether	28	2,3,3',4,4',6-Hexabromodiphenyl ether	28	HMTD	82	4-Hydroxy-3-chlorobiphenyl	17
Foramsulfuron	54	2,2',3',4,4',5,6-Hexabromodiphenyl ether	89	2,3,3',4,5,5-Hexabromodiphenyl ether	28	HMX	120, 82, 239	4-Hydroxy-4-chlorobiphenyl	17
Forchlorfenuron	54	2,2',3',4,4',5,6-Hexabromodiphenyl ether	28	2,3,3',4,5,6-Hexabromodiphenyl ether	28	HNS	82	2-Hydroxy-4-isopropyl-2,4,6-cycloheptatrien-1-one	259
Formaldehyde	72, 119, 191, 100	2,2',3',4,4',6,6'-Heptabromodiphenyl ether	28	2,3,3',4,5,6-Hexabromodiphenyl ether	28	Homosalate	100, 103	2-Hydroxy-4-monobromodiphenyl ether	31
Formaldehyde-DNPH	72, 119, 164, 191	2,2',3',4,5,6,6'-Heptabromodiphenyl ether	28	2,3,3',4',5,5'-Hexabromodiphenyl ether	28	Hydrametnylon	55, 259	2-Hydroxy-5-chlorobiphenyl	17
Formamide	72, 190	2,2',3',4,5,5,6-Hexabromodiphenyl ether	28	2,3,3',4,5,6-Hexabromodiphenyl ether	28	Hydraulic Fluid	307	2-Hydroxy-5-aziridine	55, 65, 120
Formetanate HCl	54	2,2',3',4',5,6,6'-Heptabromodiphenyl ether	28	2,3,3',4,5,6-Hexabromodiphenyl ether	28	Hydraulic oil	308	4-Hydroxybenzoic acid	100, 103
Formic acid	259	2,3,3',4,4',5,5'-Heptabromodiphenyl ether	28	2,3,3',5,5,6-Hexabromodiphenyl ether	28	Hydrazine	120, 82, 239	2-Hydroxy-biphenyl	18
Formothion	54, 119	2,3,3',4,4',5,6-Hexabromodiphenyl ether	28	2,3,4,4',5,6-Hexabromodiphenyl ether	28	Hydrogen sulfide	287	3-Hydroxy-biphenyl	18
Fosetyl aluminum	54	2,3,3',4,4',5,6-Hexabromodiphenyl ether	28	2,3,4,4',5,5'-Hexabromodiphenyl ether	28	Hydroquinone monoethyl ether	100, 102	4-Hydroxy-biphenyl	17
Fosfiazate	54	2,3,3',4,5,5,6-Hexabromodiphenyl ether	28	2,3,4,4',5,6-Hexabromodiphenyl ether	28	4-Hydroxy-2,2',3,3',4,5,5'-heptachlorobiphenyl	17	3-Hydroxycarbolurane	55, 120
Freon #11	124, 100	2,3,3',4,5,5,6-Hexabromodiphenyl ether	28	3,3',4',4',5,5'-Hexabromodiphenyl ether	28	4-Hydroxy-2,2',3,3',4,5,6'-octabromodiphenyl ether	31	1-Hydroxycyclohexene	55, 120
Freon #113	100	Heptachlor	55, 64, 119, 196	Hexachlorobenzene	120, 121, 148, 19, 214, 216	6-Hydroxy-2,2',3,3',4-pentabromodiphenyl ether	31	6-Hydroxycyclohexene	43
Freon #114	118, 100	Heptachlor epoxide	196	2,2',3',3',4,4'-Hexachlorobiphenyl	5	6-Hydroxy-2,2',3,3',4,5'-heptabromodiphenyl ether	31	Hydroxy-citronellal	100, 102
Freon #115	100	Heptachlor epoxide (Isomer A)	55, 119	2,2',3',3',4,5-Hexachlorobiphenyl	5	3-Hydroxy-2,2',3,4,4',5,5'-heptachlorobiphenyl	17	4-Hydroxylamino-2,6-dinitrotoluene	82, 239
Freon #12	100	Heptachlor epoxide (Isomer B)	55, 119	2,2',3',3',4,5-Hexachlorobiphenyl	5	6-Hydroxy-2,2',3,4,4',5,6'-heptachlorobiphenyl ether	31	2-Hydroxylamino-4,6-dinitrotoluene	82, 239
Freon #123	118	2,2',3',3',4,4',5-Hexachlorobiphenyl	212	2,2',3',3',4,6-Hexachlorobiphenyl	5	6-Hydroxy-2,2',3,4,4',5,6'-heptachlorobiphenyl ether	31	4(5)-Hydroxymethylimidazole	92
Freon #125	122	2,2',3',3',4,4',5-Hexachlorobiphenyl	6	2,2',3',3',4,6-Hexachlorobiphenyl	5	3-Hydroxy-2,2',3,4,4',5,6'-heptachlorobiphenyl	17	tris(Hydroxymethyl)nitromethane	100
Freon #13	100	2,2',3',3',4,4',6-Hexachlorobiphenyl	6	2,2',3',3',5,5'-Hexachlorobiphenyl	5	5-Hydroxy-2,2',3,4,4',5,6'-heptachlorobiphenyl	17	Tris(hydroxymethyl)nitromethane	260
Freon #134	123	2,2',3',3',4,5,5'-Heptachlorobiphenyl	6	2,2',3',3',5,6-Hexachlorobiphenyl	5	5-Hydroxy-2,2',3,4,4',5-hexachlorobiphenyl	17	Hydroxymethylpentylcyclohexene carboxaldehyde	102
Freon #134a	100	2,2',3',3',4,5,6-Hexachlorobiphenyl	6	2,2',3',3',5,6-Hexachlorobiphenyl	5	6-Hydroxy-2,2',3,4,4',5-hexabromodiphenyl ether	31	Hydroxymethylpentylcyclohexenecarboxaldehyde	102
Freon #13b1	100	2,2',3',3',4,5,6'-Heptachlorobiphenyl	6	2,2',3',3',6,6-Hexachlorobiphenyl	5	6-Hydroxy-2,2',3,4,4',6-hexabromodiphenyl ether	31	N,N-Bis(hydroxymethyl)urea (MFG)	257
Freon #141B	118	2,2',3',3',4,5,6-Hexachlorobiphenyl	6	2,2',3',4,4',5-Hexachlorobiphenyl	212	6-Hydroxy-2,2',3,4,4',6-pentabromodiphenyl ether	31	1-Hydroxypyrrene	43
Freon #142b	100	2,2',3',3',4,6,6'-Heptachlorobiphenyl	6	2,2',3',4,4',5-Hexachlorobiphenyl	5	6-Hydroxy-2,2',3,4,5,6-heptabromodiphenyl ether	31	Hymexazol	55
Freon #143A	124	2,2',3',3',4',5,6-Heptachlorobiphenyl	6	2,2',3',4,4',5-Hexachlorobiphenyl	212	4-Hydroxy-2,2',3,4,4',5,5,6-heptabromodiphenyl ether	31		
Freon #152a	100	2,2',3',3',5,5,6-Hexachlorobiphenyl	6	2,2',3',4,4',5-Hexachlorobiphenyl	5	4-Hydroxy-2,2',3,4,4',5,5,6-hexabromodiphenyl ether	31		
Freon #152a	118	2,2',3',3',5,6,6'-Heptachlorobiphenyl	6	2,2',3',4,4',6-Hexachlorobiphenyl	5	4-Hydroxy-2,2',3,4,4',5,6,6'-heptabromodiphenyl ether	31		
Freon #160	100	2,2',3',4,4',5,5'-Heptachlorobiphenyl	212	2,2',3',4,4',6-Hexachlorobiphenyl	5	4-Hydroxy-2,2',3,4,4',5-pentabromodiphenyl ether	31		
Freon #21	118, 100	2,2',3',4,4',5,5'-Heptachlorobiphenyl	6	2,2',3',4,4',6-Hexachlorobiphenyl	5	4-Hydroxy-2,2',3,4,4',5-pentabromodiphenyl ether	31		
Freon #22	100	2,2',3',4,4',5,5'-Heptachlorobiphenyl	6	2,2',3',4,5,5'-Hexachlorobiphenyl	212	4-Hydroxy-2,2',3,4,4',5-pentachlorobiphenyl	17		
Freon #23	124, 100	2,2',3',4,4',5,6-Hexachlorobiphenyl	6	2,2',3',4,5,5'-Hexachlorobiphenyl	5	4-Hydroxy-2,2',3,4,4',5-pentachlorobiphenyl	17		
Freon #40	100	2,2',3',4,4',5,6-Hexachlorobiphenyl	212	2,2',3',4,5,6-Hexachlorobiphenyl	5	3-Hydroxy-2,2',3,4,4',5,6-hexabromodiphenyl ether	31		
Fuberidazole	54	2,2',3',4,4',5,6-Hexachlorobiphenyl	6	2,2',3',4,5,6-Hexachlorobiphenyl	5	5-Hydroxy-2,2',4,4',5-pentabromodiphenyl ether	31		
#1 Fuel oil	307, 308	2,2',3',4,4',6,6'-Heptachlorobiphenyl	6	2,2',3',4,6,6-Hexachlorobiphenyl	5	6-Hydroxy-2,2',4,4',5-pentabromodiphenyl ether	31		
#2 Fuel oil	307, 308	2,2',3',4,5,5,6-Hexachlorobiphenyl	212	2,2',3',4,5,5'-Hexachlorobiphenyl	5	3-Hydroxy-2,2',4,4',6-pentabromodiphenyl ether	31		
#3 Fuel oil	307, 308	2,2',3',4,5,5,6-Hexachlorobiphenyl	6	2,2',3',4,5,6-Hexachlorobiphenyl	5	4-Hydroxy-2,2',4,4',6-pentabromodiphenyl ether	31		
#4 Fuel oil	307, 308	2,2',3',4,5,6,6'-Heptachlorobiphenyl	6	2,2',3',4,5,6-Hexachlorobiphenyl	5	3-Hydroxy-2,2',4,4',6-tetrabromodiphenyl ether	31		
#6 Fuel oil	307, 308	2,2',3',4,5,5,6-Hexachlorobiphenyl	6	2,2',3',4,5,6-Hexachlorobiphenyl	5	5-Hydroxy-2,2',4,4',6-tetrabromodiphenyl ether	31		
Fumazone	54	2,2',3',4,5,6,6'-Heptachlorobiphenyl	6	2,2',3',4,5,6-Hexachlorobiphenyl	5	6-Hydroxy-2,2',4,4',6-tetrabromodiphenyl ether	31		
Furalaxyl	54	2,3,3',4,4',5,5'-Heptachlorobiphenyl	6	2,2',3',4,5,6-Hexachlorobiphenyl	212	4-Hydroxy-2,2',4,4',5-pentabromodiphenyl ether	31		
2-Furaldehyde	191	2,3,3',4,4',5,6-Hexachlorobiphenyl	6	2,2',3',5,5,6-Hexachlorobiphenyl	5	4-Hydroxy-2,2',4,4',5-pentachlorobiphenyl	17		
2-Furaldehyde-DNPH	72, 191	2,3,3',4,4',5,6-Hexachlorobiphenyl	6	2,2',3',5,6,6-Hexachlorobiphenyl	5	4-Hydroxy-2,2',4,4',5-pentachlorobiphenyl	17		
Furthiocarb	54	2,3,3',4,5,5,6-Hexachlorobiphenyl	6	2,2',4,4',5,5'-Hexachlorobiphenyl	212	5-Hydroxy-2,2',4,4',6-tetrachlorobiphenyl	17		
Furizole	54	2,3,3',4,5,5,6-Hexachlorobiphenyl	6	2,2',4,4',5,5'-Hexachlorobiphenyl	5	3-Hydroxy-2,2',4,4',5-pentachlorobiphenyl	17		

Organic Analyte Index

p-Ionone	100
loxyhil	55, 120
Iponazole	55
Iprobenfos	55
Iprodione	55, 120
Iprovalicarb	55
Irganox® 1035	88, 91
Irganox 1081	88
Irganox 1098	88
Irganox 1425 WL	88
Irganox 245	88
Irganox 259	88
Irganox 3125	88
Irganox 3144 FF	88
Irganox 565	88
Irganox E 201	88
Irganox MD 1024	88
Irgardol	55, 259
Isazophos	55
Isobenzan	55
Isobenzofuranone	55
Isobutanol	1
2-Isobutyl-3-methoxypyrazine	107
Isobutyl alcohol	120, 196, 202
iso-Butylbenzene	67
Isobutylbenzene	243, 310
Isobutyl benzyl phthalate	80
Isobutyl cyclohexyl phthalate	80
Isobutyl paraben	100, 103
Isobutyraldehyde	191
Isobutyraldehyde-DNPH	72, 191
Isocarbamid	55
Isocarboxophos	55
Isodecyl diphenyl phosphate	38
Isodrin	55, 120, 196
Isoeugenol	100, 102
Isolenphos	55, 120
Isolenphos-methyl	56
Isonox® 132	88
Isonox 232	88
Isocetane	298
Isophorone	72, 120, 196
Ispocarb	56
Ispropalin	56, 120
Isoopropanol	71, 120, 202, 259
2-Isopropyl-3-methoxypyrazine	107
2-Isopropyl-6-methyl-4-pyrimidinol	56
2-Isopropylamino-4,6-dichloro-s-triazine	56, 65
Isopropylbenzene	69, 120, 203, 221
Isopropyl ether	190
Isopropyl paraben	100, 103
1-(4-Isopropylphenyl)-3-methylurea	56
n,n'-bis(4-Isopropylphenyl)urea	23
2-Isopropylthioxanth-9-one	92, 248
2- and 4-Isopropylthioxanth-9-one	92, 248
p-Isopropyltoluene	69, 120, 203, 221
Isoprothiolane	56
Isproturon	56, 259
Ispyrasam	56
Isoquinoline	40
Isosafrole	120, 196
Isovaleraldehyde-DNPH	120
Isobaben	56
Isosafutole	56
Isosaxthion	56

J

Jayflex® 77	90
Jayflex D1DP	90
Jayflex D1NP	90
Jayflex D1DP	90
Jayflex L11P-E	90
Jayflex T1NTM	90
Jet Fuel	308
Jet Reference Fuel	307
JP-10 Aviation Fuel	307
JP-10 Fuel	308
JP-4 Fuel	308
JP-4 Jet Fuel	307
JP-5 Fuel	307, 308
JP-7 Fuel	307, 308
JP-8 Fuel	307, 308
JP-TS	308
JP-TS Aviation Fuel	307

K

Kadethrine	56
Karbutilate	56
Karmex	56, 120
Kellthane	56, 120
Kemamide® E ultra	90
Kepone	56, 120, 196
Kerosene	307, 308, 309
3-Ketocarbofuran	56, 120
Kresoxim-methyl	56

L	
Lacquer thinner	307, 308
Lactate	335
L-(+)-Lactic acid	259
Lactofen	56
Lanolin, anhydrous	100
Laurex®	90
Lauric acid	259
Lauryl dimethylamine oxide	259
Lenacil	56
Leptophos	56, 120, 217
Lethane 384	56
Lignin (Alkaline)	259
d-Limonene	100, 102
Linalool	100, 102, 259
Lindane	56, 64, 120
Linolein	94
Linolenin	94
Linuron	56, 120, 179
Lintrel	56, 120
Lowinox AH25	88
Lowinox CPL	88
Lowinox TBM-6	88
Lufenuron	56

M

Magnesium422	377
Magnesium bis(monoperoxyphthalate) hexahydrate	259
Magnesium nitrate	334
Malaoxon	56
Malate	335
Malathion	56, 120, 217
Maleate	335
Maleic hydrazide	56
Mancozeb	56
Mandipropamid	56
Maneb	56
Margosa extract	259
Markstat® 51	90
Markstat® 60	88
MCPA	174, 219
MCPA 2-ethylhexyl ester	56
MCPA acid	56, 120
MCPA methyl ester	56, 120
MCPB acid	56, 120
MCPB methyl ester	56, 120
MCPP	174, 219
MCPP acid	56, 120
MCPP methyl ester	56, 120
Mecarbam	56
Mecoprop, 2-Ethylhexyl ester	120, 56
Mecoprop-1-octyl ester	56
Mecoprop-2-octyl ester	56
Mecoprop-p	56
Mefenacet	56
Mefenpyr-diethyl	56
Melamine	92
(R)-p-Mentha-1,8-diene	259
(+)-cis-p-Menthane-3,8-diol	259
Mepanipyrim	56
Mephosolan	56
Mepiquat chloride	56
Meptyldinocap	56
Mercaptobenzothiazole	120, 180
2-Mercaptobenzothiazole	259
Merphos	56, 120
Mesosulfuron-methyl	56
Mesotrione	56
Metabromsalon	100
Metalfumizone	56
Metalaxyl	56, 120
Metalaxyl-M	56
Metaldehyde	56, 120
Metamitron	57, 120
Melan-sodium dihydrate	57, 259
Metanil Yellow	105
meta-Phenylenediamine	101
Metazachlor	57, 120
Metconazole	57
Methabenzthiazuron	57
Methacrilols	57
Methacrylonitrile	69, 120, 196
Methanol	71, 120, 202, 312, 322
Methapyriene	120, 196, 233
Methidathion	57, 120
Methiocarb	57, 120, 179
Methiocarb sulfone	57
Methiocarb sulfoxide	57
Methomyl	57, 120, 179
Methoprene	57, 120
Methoprotrene	57
4'-Methoxy-2,2',3,3',4,5,5'-heptachlorobiphenyl	17
4'-Methoxy-2,2',3,3',4,5,6,6'-octabromodiphenyl ether	32
6-Methoxy-2,2',3,3',4-pentabromodiphenyl ether	32

[illegible]

4-Methyl-2H-isothiazol-3-one	259
4-Methyl-2-pentanone	72, 121, 196, 202
bis(4-Methyl-2-pentyl)phthalate	78
2-Methyl-2-propanethiol	287
Methyl 3,5-dichlorobenzoate	57, 120
2-Methyl-4,6-dinitroanisole	57
2-Methyl-4,6-dinitrophenol	73
2-Methyl-4-nitroaniline	75, 121, 215, 84
3-Methyl-4-nitrophenol	57, 121
Methyl 5,8,11,14,17-Eicosapentaenoate	93
9-Methyl-9-phenylfluorene	40
2'-Methylacetophenone	107
9-Methylacridine	23
Methylamine	75, 190
Methylamine hydrochloride	57
1-Methylantracene	40
2-Methylantracene	40
9-Methylantracene	40
Methyl anthranilate	259
Methyl arachidonate	93
1-Methylbenz[a]anthracene	40
10-Methylbenz[a]anthracene	40
2-Methylbenz[a]anthracene	40
3-Methylbenz[a]anthracene	40
4-Methylbenz[a]anthracene	40
5-Methylbenz[a]anthracene	40
6-Methylbenz[a]anthracene	40
7-Methylbenz[a]anthracene	40
9-Methylbenz[a]anthracene	40
10-Methylbenzo[a]pyrene	40
7-Methylbenzo[a]pyrene	40
8-Methylbenzo[a]pyrene	40
9-Methylbenzo[a]pyrene	40
3-Methylbenzo[b]thiophene	287
5-Methylbenzo[b]thiophene	287
1-Methylbenzo[c]phenanthrene	40
2-Methylbenzo[c]phenanthrene	40
3-Methylbenzo[c]phenanthrene	40
4-Methylbenzo[c]phenanthrene	40
5-Methylbenzo[c]phenanthrene	40
2-Methylbenzofuran	107
4-Methyl-benzylidene camphor	101, 103
Methyl Blue	105
Methyl bromide	69
Methyl bromoacetate	77, 120, 162, 163
Methyl bromochloroacetate	77, 120, 163
Methyl bromodichloroacetate	77, 120, 163
Methylcellulose	85
Methyl chloride	69
Methyl chloroacetate	77, 162, 163
Methyl chlorodibromoacetate	77, 120, 163
3-Methylcholanthrene	40, 120, 196
4-Methylchrysene	40
5-Methylchrysene	40
Methyl cis-11,14,17-eicosatrienoate	93
Methyl cis-11,14-eicosadienoate	93
Methyl cis-11-eicosenoate	93
Methyl cis-11-octadecenoate	93
Methyl cis-13,16,19-docosatrienoate	93
Methyl cis-13,16-docosadienoate	93
Methyl cis-13-docosenoate	93
Methyl cis-15-tetracosenoate	93
Methyl cis-4,7,10,13,16,19-Docosahexenoate	93
Methyl cis-5-eicosenoate	93
Methyl cis-6-octadecenoate	93
Methyl cis-7,10,13,16,19-Docosapentaenoate	93
Methyl cis-7,10,13,16-Docosatetraenoate	93
Methyl cis-8,11,14-eicosatrienoate	93
Methyl cis-8-eicosenoate	93
Methyl cis-9-hexadecenoate	93
Methyl cis-9-octadecenoate	93
6-Methylcoumarin	101
7-Methylcoumarin	101, 102
Methyldecanoate	94
Methyl dibromoacetate	77, 120, 162, 163
Methyl dibromoglutaronitrile	101
Methyl dichloroacetate	77, 120, 162, 163
Methyl disulfide	287
Methyl dodecanoate	94
Methyleicosanoate	94
4,4'-Methylenebis(2-chloroaniline)	106
4,4'-Methylene bis(2-chloroaniline)	43
4,4'-Methylenebis(2-chloroaniline)	75
N,N'-Methylenebis morpholine	259
4,4'-Methylenebis(phenyl isocyanate)	226
Methylene chloride	69, 101, 221
Methylene chloride-d2	69, 120, 144
Methylene dithiocyanate	259
4,5-Methylenephenanthrene	40
1-Methyl ethyl benzene	69
Methyl ethyl ketone	72, 121, 196, 202
Methyleugenol	101, 102
2-Methylfluoranthene	40
Methyl g-linolenate	93
Methyl heicoisanoate	94
Methylheptadecanoate	94

Methyl heptyne carbonate	101, 102
Methylhexadecanoate	94
1-Methylimidazole	92
2-Methylimidazole	92
4-Methylimidazole	92
4-Methylimidazolidine-2-thione	149
Methyl iodide	69, 121, 201
Methyl iodide: Iodomethane	196
2-Methylisoborneol	107
Methyl isobutyl ketone	121, 107
Methyl isothiocyanate	69, 121
Methyl isothiocyanate (MITC)	189
Methyl linoleate	93
Methyl linolealdate	93
Methyl lincolate	93
Methyl mercaptan	287
Methyl methacrylate	69, 121, 196
Methyl methacrylate monomer	101
Methyl methanesulfonate	69, 121, 196
N-Methyl-N'-nitro-N-nitrosoguanidine	43, 44
1-Methylnaphthalene	40, 121, 236, 255
2-Methylnaphthalene	40, 121, 196, 236, 255
Methylnonadecanoate	94
Methylnonote	94
Methyl nonyl ketone	57, 121
Methyl O-Acetylinicolenate	92
Methyl octadecadienoate	93
Methyloctadecanoate	94
Methyloctanoate	94
Methyl paraben	97, 101, 103
Methyl paraoxon	57, 121
Methyl parathion	57, 121, 196
Methylpentachlorophenyl sulfide	57
Methylpentadecanoate	94
1-Methylphenanthrene	40
2-Methylphenanthrene	40
3-Methylphenanthro[3,4-c]phenanthrene	40
1-Methylpyrene	40
Methyl sulfide	287
4-Methylsulfonyl-2,2',3,3',4',6-hexachlorobiphenyl	18
4-Methylsulfonyl-2,2',3,3',4',5',6-hexachlorobiphenyl	18
3-Methylsulfonyl-2,2',3',4',5,5',6-heptachlorobiphenyl	18
4-Methylsulfonyl-2,2',3',4',5,5',6-heptachlorobiphenyl	18
3-Methylsulfonyl-2,2',3',4',5,5',6-hexachlorobiphenyl	18
4-Methylsulfonyl-2,2',3',4',5,5',6-hexachlorobiphenyl	18
3-Methylsulfonyl-2,2',3',4',5-pentachlorobiphenyl	18
4-Methylsulfonyl-2,2',3',4',5-pentachlorobiphenyl	18
3-Methylsulfonyl-2,2',3',4',5,6-pentachlorobiphenyl	18
4-Methylsulfonyl-2,2',3',4',5,6-pentachlorobiphenyl	18
3-Methylsulfonyl-2,2',4',5,5',6-hexachlorobiphenyl	18
3-Methylsulfonyl-2,2',4',5,5',6-pentachlorobiphenyl	18
4-Methylsulfonyl-2,2',4',5,5',6-pentachlorobiphenyl	18
4-Methylsulfonyl-2,2',4',5,6-pentachlorobiphenyl	18
3-Methylsulfonyl-2,2',4',5,6-pentachlorobiphenyl	18
4-Methylsulfonyl-2,2',4',5,6-pentachlorobiphenyl	18
3-Methylsulfonyl-2,2',4',5,6-tetrachlorobiphenyl	18
4-Methylsulfonyl-2,2',4',5,6-tetrachlorobiphenyl	18
3-Methylsulfonyl-2,2',4',5-tetrachlorobiphenyl	18
4-Methylsulfonyl-2,2',4',5-tetrachlorobiphenyl	18
3-Methylsulfonyl-2,2',4',5-tetrachlorobiphenyl	18
4-Methylsulfonyl-2,2',4',5-tetrachlorobiphenyl	18
3-Methylsulfonyl-2,2',4',5-tetrachlorobiphenyl	18
4-Methylsulfonyl-2,2',4',5-tetrachlorobiphenyl	18
3-Methylsulfonyl-4-methyl-2',3',4',5,5'-pentachlorobiphenyl	18
Methyl t-butyl ether (MBE)	171
Methyltetracosanoate	94
Methyltetradecanoate	94
2-Methylthiophene	287
3-Methylthiophene	287
Methyl trans-11-eicosenoate	93
Methyl trans-13-docosenoate	93
Methyl trans-2-butenolate	101, 102
Methyl trans-6-octadecenoate	93
Methyl trans-9-hexadecenoate	93
Methyl tribromoacetate	77, 121, 163
Methyl trichloroacetate	77, 121, 162, 163
Methyltricosanoate	94
Methyltridecanoate	94
Methyl trihept	57
Methylundecanoate	94
Metiram	57
Metobromuron	57
Metolachlor	57, 121
Metolcarb	57
Metosulam	57
Metoxuron	57
Metalonone	57
Metribuzin	57, 121
Metsulfuron methyl	121
Metsulfuron-methyl	57
Miniphos	57, 121
Mexacarbate	57, 121, 179

Organic Analyte Index

MGK-264	57, 121	Nicosamide	57, 121	N-phenyl-1-naphthylamine	43	1,2,3,7,8-PCDF	197	2,3,3',4',6-Pentachlorobiphenyl	5
MGK-326	57, 121	Nicosulfuron	57			Penconazole	58	2,3,3',5,5'-Pentachlorobiphenyl	5
Mineral spirits	307, 308	Nitenpyram	58	O		Pencycuron	58	2,3,3',5,6-Pentachlorobiphenyl	5
Mirex	57, 121	Nitralin	58	Oak Moss extract	101, 102	Pendimethalin	58, 122	2,3,3',5,6-Pentachlorobiphenyl	5
Molinate	57, 121	Nitrapyrin	58	Oct-1-ene-3-ol	259	Penoxsulam	58	2,3,4,4',5-Pentachlorobiphenyl	5
Monalide	57	2-Nitro-1,4-phenylenediamine	105, 106	2,2',3,3',4,4',5,5'-Octabromobiphenyl	34	Pentabromobenzene	36	2,3,4,4',5-Pentachlorobiphenyl	5
Monitor	57, 121	5-Nitroacenaphthene	42	2,2',3,3',4,4',5,5',6,6'-Octabromobiphenyl	34	Pentabromobenzylacrylate	36	2,3,4,5,6-Pentachlorobiphenyl	5
Mono-2-heptyl phthalate	79	2-Nitroaniline	42, 76	2,2',3,3',4,4',5,5',6,6'-Octabromobiphenyl ether	28	Pentabromobenzylbromide	36	2,3,4',5,6-Pentachlorobiphenyl	5
Monocaradin	94	3-Nitroaniline	42, 76	2,2',3,3',4,4',5,5',6,6'-Octabromodiphenyl ether	28			2,3,4,4',5-Pentachlorobiphenyl	5
Monobehenin	94	4-Nitroaniline	42, 76	2,2',3,3',4,4',5,5',6,6'-Octabromodiphenyl ether	28			2,3,4,4',6-Pentachlorobiphenyl	5
Monobenzyl phthalate	101, 103	m-Nitroaniline	76, 121, 197	2,2',3,3',4,4',5,5',6,6'-Octabromodiphenyl ether	28			2,3,4,5,5'-Pentachlorobiphenyl	5
Monobenzyl phthalate (mBzP)	79	o-Nitroaniline	76, 121, 196	2,2',3,3',4,4',5,5',6,6'-Octabromodiphenyl ether	28			2,3,4,5,6-Pentachlorobiphenyl	5
Monobromoacetic acid	77, 121, 163	p-Nitroaniline	76, 121, 197	2,2',3,3',4,4',5,5',6,6'-Octabromodiphenyl ether	28			2,3,3',4,5-Pentachlorobiphenyl	5
Monobutyl phthalate	101, 103	4-Nitroanisole	58, 121	2,2',3,3',4,4',5,5',6,6'-Octabromodiphenyl ether	28			2,3,4,4',5-Pentachlorobiphenyl	5
Monobutyl phthalate (mBP)	79	2-Nitroanthracene	42	2,2',3,3',4,4',5,5',6,6'-Octabromodiphenyl ether	28			2,3,4,5,5'-Pentachlorobiphenyl	5
Monocaprin	94	9-Nitroanthracene	42	2,2',3,3',5,5',6,6'-Octabromodiphenyl ether	28			2,3,4,5,6-Pentachlorobiphenyl	5
Monocaprylin	94	7-Nitrobenz[a]anthracene	42	2,2',3,3',4,4',5,5',6,6'-Octabromodiphenyl ether	28			3,3',4,4',5-Pentachlorobiphenyl	5
Monochloroacetic acid	77, 121, 163	6-Nitrobenz[a]pyrene	42	2,2',3,3',4,4',5,5',6,6'-Octabromodiphenyl ether	28			3,3',4,5,5'-Pentachlorobiphenyl	5
Monocrotophos	57, 121, 217	Nitrobenzene	42, 69, 121, 122, 82, 239	2,2',3,3',4,4',5,5',6,6'-Octabromodiphenyl ether	28			1,2,3,7,8-Pentachlorodibenzofuran	23
Monocyclohexyl phthalate	79	Nitrobenzene-d5	69, 121, 158, 177	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			2,3,4,7,8-Pentachlorodibenzofuran	23
Monocyclohexadienol	94	2-Nitrobiphenyl	42, 44	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			1,2,3,4,7-Pentachlorodibenzo-p-dioxin	21
Monocyclohexenol	94	3-Nitrobiphenyl	42, 44	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			2,3,4,7,8-Pentachlorodibenzo-p-dioxin	21
Monolaidin	94	4-Nitrobiphenyl	42, 44	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			2,3,3',4,4'-Pentachlorodibenzo-p-dioxin	21
Monothetanolamine	101	6-Nitrochrysene	42	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			1,2,3,8,9-Pentachlorodibenzo-p-dioxin	21
Monothetylhexyl phthalate	101, 103	3-Nitrobenzofuran	23	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			1,2,4,6,8/1,2,4,7,9-Pentachlorodibenzo-p-dioxin	21
Monothetylhexyl phthalate (mEHP)	79	2-Nitrobenzothioephene	42	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			2,3,4,7,8-Pentachlorodibenzo-p-dioxin	21
Monothetyl phthalate	101, 103	N-Nitrodimethylamine	82, 239	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			2,3,3',4,4'-Pentachlorodiphenyl ether	20
Monoethyl phthalate (mEP)	79	2-Nitrodiphenylamine	85	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			2,3,3',4,4'-Pentachlorodiphenyl ether	27
Monohexyl phthalate	79	4-Nitrodiphenylamine	85	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			2,2',3,4,6-Pentabromodiphenyl ether	27
Monoisobutyl phthalate	79	Nitrofen	58	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			2,2',4,4',5-Pentabromodiphenyl ether	89
Monoisobutyl phthalate	79	3-Nitrofluoranthene	42	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			2,2',4,4',6-Pentabromodiphenyl ether	89
Monoisopropyl phthalate	79	2-Nitrofluorene	42	2,2',3,3',4,4',5,5'-Octachlorobiphenyl	6			2,2',4,4',5-Pentabromodiphenyl ether	27
Monolaurin	94	Nitrogen	287	Octachlorodibenzofuran	19			2,2',4,5,5'-Pentabromodiphenyl ether	27
Monolinolein	94	Nitroglycerin	82, 239	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	23			2,2',4,5,6-Pentabromodiphenyl ether	27
Monolinolenin	94	1-Nitroglycerin	82, 239	Octachlorodibenzo-p-dioxin	19			2,2',4,5,6-Pentabromodiphenyl ether	27
Monolinuron	57, 259	2-Nitroglycerin	82, 239	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	21			2,2',4,6,6'-Pentabromodiphenyl ether	27
Monomethyl phthalate	79, 101, 103	1-Nitroglycerine	85	Octachloronaphthalene	19			2,3,3',4,4'-Pentabromodiphenyl ether	27
Monomethyltetrachloroterephthalate	57	2-Nitroglycerine	85	1,2,3,4,5,6,7,8-Octachloronaphthalene	20			2,3,3',4,5-Pentabromodiphenyl ether	27
Monomyrstin	94	Nitroguanidine	121, 82, 239	Octachlorostyrene	19			2,3,3',4,5'-Pentabromodiphenyl ether	27
Monomyrstolein	94	Nitromethane	121, 82, 239	Octadecylbenzene	69			2,3,3',4,6-Pentabromodiphenyl ether	27
Monon-pentyl phthalate	79, 101	1-Nitronaphthalene	42	Octanal	72, 122			2,3,3',4',5-Pentabromodiphenyl ether	27
Monooctyl phthalate	79	2-Nitronaphthalene	42	Octanal-DNPH	72, 122, 164			2,3,3',5,5'-Pentabromodiphenyl ether	27
Monocolein	94, 300, 304	5-Nitro-o-toluidine	76, 121, 197	Octanoic acid	259			2,3,3',5,6-Pentabromodiphenyl ether	27
Monopalmitin	94	3-Nitrophenanthrene	42	Oethilnone	58			2,3,3',5,6-Pentabromodiphenyl ether	27
Monopalmitolein	94	9-Nitrophenanthrene	42	2-Octyl-2H-isothiazol-3-one	259			2,3,3',5,6-Pentabromodiphenyl ether	27
Monopetroselinin	94	2-Nitrophenol	42, 44, 73	Octylbenzene	69			2,3,4,4',5-Pentabromodiphenyl ether	27
Monostearin	94	3-Nitrophenol	73	Octyl-dimethyl-PABA	101, 103			2,3,4,4',6-Pentabromodiphenyl ether	27
Monovaccenin	94	4-Nitrophenol	42, 44, 73	Octyl-methoxycinnamate	101, 103			2,3,4,5,6-Pentabromodiphenyl ether	27
Monuron	57, 121, 179	o-Nitrophenol	121, 197	N-Octyl n-decyl phthalate (Tech Mix)	80			2,3,4',4',5-Pentabromodiphenyl ether	27
2-Monuron	57, 65	p-Nitrophenol	121, 197	Octylphenol	261			2,3,4',4',5-Pentabromodiphenyl ether	27
Monuron TCA	57, 121, 179	4-Nitrophenyl phenyl ether	77, 216	4-n-Octylphenol	261			2,3,4,5,5'-Pentabromodiphenyl ether	27
Morfex® 150	90	1-Nitropyrene	42	4-tert-Octylphenol	261			2,3,4',5,6-Pentabromodiphenyl ether	27
Morfex 190	90	4-Nitroquinoline-1-oxide	121, 197	4-n-Octylphenol diethoxylate	261			2,3,3',4,5-Pentabromodiphenyl ether	27
Morfex 560	90	N-Nitrosodimethylamine	76, 121, 197	4-tert-Octylphenol diethoxylate	261			2,3,3',4',6-Pentabromodiphenyl ether	27
Morfex x-1125	90	N-Nitrosodimethylamine	76, 121, 197	4-n-Octylphenol monoethoxylate	261			2,3,4,4',5-Pentabromodiphenyl ether	27
MTFA	300, 304	N-Nitrosodimethylamine-d6	152	4-tert-Octylphenol monoethoxylate	261			2,3,4,5,5'-Pentabromodiphenyl ether	27
MBE	77, 121	N-Nitrosodi-n-butylamine	76, 121, 197, 202	4-n-Octylphenol triethoxylate	261			2,3,4,5,6-Pentabromodiphenyl ether	27
Musk ambrette	102	N-Nitrosodi-n-propylamine	76, 121	4-tert-Octylphenol triethoxylate	261			2,3,4',4',5-Pentabromodiphenyl ether	27
Mycolbutanol	57, 121	N-Nitrosodiphenylamine	76, 85, 121, 197, 234	Di-n-octyl phthalate	78, 118, 99, 103			2,3,4,5,5'-Pentabromodiphenyl ether	27
Myristolein	94	N-Nitrosodipropylamine	197	Di-n-octyl phthalate-3,4,5,6-d4	79, 91			Pentabromomethylbenzene	36
Myristyltrimethylammonium bromide	259	N-Nitrosomethylethylamine	76, 121, 197	Ofurace	58			Pentabromophenol	35, 205
		N-Nitrosomorpholine	121, 197	Olein	94			1,4-bis(Pentabromophenoxy)tetraabromobenzene	36
		N-Nitroso-N-methyl ethylamine	76	Ometoate	58, 122			Pentabromotoluene	37
		1-Nitrosopiperidine	76	Orange II sodium salt	105			Pentachloroanisole	58
		N-Nitrosopiperidine	121, 197	Orbencarb	58			Pentachloroanisole	58, 122
		N-Nitrosopyrrolidine	121, 197	Orthophosphoric acid	259			Pentachlorobenzene	69, 122, 197
		Nitrothal-isopropyl	58	Orthosulfamuron	58			2,2,3,3',4-Pentachlorobiphenyl	4
		2-Nitrotoluene	42, 44, 121, 239, 82	Oryzalin	58, 122, 180			2,2,3,3',5-Pentachlorobiphenyl	4
		3-Nitrotoluene	82, 121, 239	Oxex	58			2,2,3,3',6-Pentachlorobiphenyl	4
		4-Nitrotoluene	82, 121, 239	Oxabetrinil	58			2,2',3,4,4'-Pentachlorobiphenyl	4
		2,2',3,3',4,4',5,5',6-Nonabromodiphenyl ether	28	Oxadiazol	58			2,2',3,4,5-Pentachlorobiphenyl	4
		2,2',3,3',4,4',5,5',6-Nonabromodiphenyl ether	28	Oxadiazon	58, 122			2,2',3,4,5-Pentachlorobiphenyl	4
		2,2',3,3',4,4',5,5',6,6'-Nonabromodiphenyl ether	28	Oxadixyl	58			2,2',3,4,5-Pentachlorobiphenyl	212
		cis-Nonaclor	58, 121	Oxalate	335, 336			2,2',3,4,5-Pentachlorobiphenyl	4
		2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	212	Oxamyl	58, 122, 179			2,2',3,4,6-Pentachlorobiphenyl	4
		2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	6	Oxasulfuron	58			2,2',3,4,6-Pentachlorobiphenyl	4
		2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl	6	Oxaziflomefene	58			2,2',3,4',5-Pentachlorobiphenyl	4
		2,2',3,3',4,4',5,5',6,6'-Nonachlorobiphenyl	6	Oxazolidine	259			2,2',3,4',6-Pentachlorobiphenyl	4
		Naugard® 412S	88	Oxycarboxin	58, 122			2,2',3,5,5'-Pentachlorobiphenyl	4
		Naugard 445	88	Oxychlorane Isomer	58, 122			2,2',3,5,6-Pentachlorobiphenyl	4
		Naugard 635	88	Oxymetolon-methyl	58, 122			2,2',3,5,6-Pentachlorobiphenyl	4
		Naugard 956	88	4,4'-Oxydianiline	106			2,2',3,6,6'-Pentachlorobiphenyl	4
		Naugard A	88	4,4'-Oxydianiline	76			2,2',3,4,5-Pentachlorobiphenyl	4
		Naugard B-25	88	Oxyluorfen	58, 122			2,2',3',4,6-Pentachlorobiphenyl	4
		Naugard BHT	88					2,2',4,4',5-Pentachlorobiphenyl	4
		Naugard HM-22	88					2,2',4,4',6-Pentachlorobiphenyl	4
		Naugard J	88					2,2',4,5,5'-Pentachlorobiphenyl	212
		Naugard NBC	88					2,2',4,5,5'-Pentachlorobiphenyl	4
		Naugard PANA	88					2,2',4,5,6-Pentachlorobiphenyl	4
		Naugard PHR	88					2,2',4,5,6-Pentachlorobiphenyl	4
		Naugard PS-30	88					2,2',4,5,6-Pentachlorobiphenyl	4
		Naugard PS-35	88					2,2',4,6,6'-Pentachlorobiphenyl	4
		Naugard Q Extra	88					2,3,3',4,4'-Pentachlorobiphenyl	4
		Naugard RM-51	88					2,3,3',4,5-Pentachlorobiphenyl	4
		Naugard Super Q	88					2,3,3',4,5'-Pentachlorobiphenyl	5
		Naugard XL-1	88					2,3,3',4,6-Pentachlorobiphenyl	5
		Neburon	57, 121, 179					2,3,3',4',5-Pentachlorobiphenyl	5
		Nickel nitrate	334					2,3,3',4',6-Pentachlorobiphenyl	212

Organic Analyte Index

Phosphamidon	59, 122, 217	Protocatechuic acid	101, 103	Silica	339	Tebufenpyrad	61	3,3',4,4'-Tetrachloroazobenzene	23
Phoxim	59	Proximpham	59	Silicium dioxide	260	Tebupirimfos	61	3,3',4,4'-Tetrachloroazoxybenzene	23
Phthalate	335	Pymetrozin	59	Silicon dioxide	260	Tebutam	61	1,2,3,4-Tetrachlorobenzene	61, 70
p-Hydroxyanisole	100	Pyracarbolid	59	Silquest® A-187	89	Tebuthiuron	61, 123	1,2,3,5-Tetrachlorobenzene	61, 70
Picene	40	Pyraclofos	59	Silquest A-1100	89	Teflubenzuron	61, 123	1,2,4,5-Tetrachlorobenzene	61, 70, 123, 197, 216
Picloram	59, 122, 180	Pyraclostrobin	59	Silquest A-1102	89	Tefluthrin	61, 123	2,2',3,3'-Tetrachlorobiphenyl	4
Picloram methyl ester	59, 122	Pyraflufen-ethyl	59	Silquest A-1289	89	TEGDN	83, 239	2,2',3,4'-Tetrachlorobiphenyl	4
Picolinafen	59	Pyrasulfotole	59	Silquest A-137	89	Tembotrione	61	2,2',3,4'-Tetrachlorobiphenyl	4
2-Picoline	122, 197, 202	Pyrazon	59, 122	Silquest A-2171	89	TEPP	61, 123, 217	2,2',3,5'-Tetrachlorobiphenyl	4
Picoxystrobin	59	Pyrazophos	59	Silver chloride	260	Terbacil	61, 123	2,2',3,5'-Tetrachlorobiphenyl	212
Picramic acid	122, 83, 239	Pyrazoxyfen	59, 122	Silver nitrate	260	Terbufos	61, 123, 217	2,2',3,5'-Tetrachlorobiphenyl	4
Picric acid	122, 83, 239	Pyrene	40, 41, 122, 197, 236, 255	Silvex	60, 123, 197	Terbufos sulfone	61	2,2',3,6'-Tetrachlorobiphenyl	4
Pindone	59	Pyrene-d10	122, 153	Silvex 2-ethylhexyl ester	60	Terbufos sulfoxide	61	2,2',3,6'-Tetrachlorobiphenyl	4
Pinoxaden	59	Pyrethrins	59	Silvex methyl ester	60, 64, 123	Terbumeton	61	2,2',4,4'-Tetrachlorobiphenyl	4
Piperalin	59	Pyrethrins (Tech Mix)	260	Simazine	60, 65, 123, 174	Terbutylazine	61, 65, 123, 174, 260	2,2',4,5'-Tetrachlorobiphenyl	4
Piperonyl butoxide	59, 259	Pyributicarb	59	Simeton	60	Terbutylazine desethyl	61	2,2',4,5'-Tetrachlorobiphenyl	4
Piperophos	59	Pyridaben	60	Simetryn	60, 123, 174	Terbutol	61	2,2',4,6'-Tetrachlorobiphenyl	4
Pirimicarb	59, 122	Pyridalyl	60	S-Methoprene	259	Terbutryn	174, 260	2,2',4,6'-Tetrachlorobiphenyl	4
Pirimicarb-desmethyl	59	Pyridaphenthion	60	S-Metolachlor	57	4-Terphenyl-d14	133	2,2',5,5'-Tetrachlorobiphenyl	212
Pirimiphos-ethyl	59	Pyridate	60	Sodium benzoate	97, 260	m-Terphenyl	19, 89	2,2',5,5'-Tetrachlorobiphenyl	4
Pirimiphos-methyl	59, 122	Pyridine	44, 76, 122, 197, 202	Sodium bicarbonate	336	o-Terphenyl	315, 312, 313, 316, 89, 321, 323, 19	2,2',5,6'-Tetrachlorobiphenyl	4
Polycizer® Butyl Oleate	90	Pyridine-2-thiol-1-oxide, sodium salt	260	Sodium bisulfite	260	p-Terphenyl	19, 89	2,2',6,6'-Tetrachlorobiphenyl	4
Polycizer DP 500	90	Pyridine-d5	76, 122, 177	Sodium bromide	260	p-Terphenyl-d14	123, 153	2,3,3',4'-Tetrachlorobiphenyl	4
Polyethylene glycol	71, 101	1-(2-Pyridyl)piperazine	296	Sodium carbonate	336	Terrazole	61, 123	2,3,3',4'-Tetrachlorobiphenyl	4
Polyethylene glycol-600	194	Sodium chlorate	60	Pyrifluquinazon	260	3,4,5,6-Tetrabromo-(1,2)benzoquinone	261	2,3,3',5'-Tetrachlorobiphenyl	4
Polyethylene glycol nonaphenyl ether	98	Pyrimethanil	60	Sodium chloride	260	2,3,5,6-Tetrabromo-(1,4)benzoquinone	261	2,3,3',5'-Tetrachlorobiphenyl	4
Polyvinylpyrrolidone	101	Pyrimidifen	60	Sodium chlorite	260	2,3,4,5-Tetrabromobenzoic acid	37	2,3,3',6'-Tetrachlorobiphenyl	4
Poly(vinylpyrrolidone) iodine complex	259	(E)-Pyriminobac-methyl	60	Sodium dichloroisocyanurate dihydrate	260	2,2',4,5'-Tetrabromobiphenyl	34	2,3,4,4'-Tetrachlorobiphenyl	4
Polywax 1000	273, 298	Pyriphenox	60	Sodium diethyldithiocarbamate trihydrate	60	2,2',5,5'-Tetrabromobiphenyl	34	2,3,4,5-Tetrachlorobiphenyl	4
Polywax 500	273, 298	Pyriprophos	60, 260	Sodium dimethylarsinate	260	2,2',5,6'-Tetrabromobiphenyl	34	2,3,4,5-Tetrachlorobiphenyl	4
Polywax 655	273, 298	Pyrocatechol	101	Sodium dimethyldithiocarbamate hydrate	260	3,3',4,4'-Tetrabromobiphenyl	34	2,3,4',5'-Tetrachlorobiphenyl	4
Polywax 850	298	Sodium hydroxide	102	Sodium dihydroxide	102	3,3',5,5'-Tetrabromobiphenyl	34	2,3,4',6'-Tetrachlorobiphenyl	4
Ponceau SX	105, 106	Pyroxulam	60	Sodium lignosulfonate (Tech)	260	Tetrabromobisphenol A	36	2,3,5,6-Tetrachlorobiphenyl	4
Potassium dichromate	101, 103	Pyrolye	40	Sodium metabisulfite	260	Tetrabromobisphenol A bis(2,3-dibromopropyl) ether	36	2,3,5,6-Tetrachlorobiphenyl	4
Potassium dimethyl dithiocarbamate	59, 259	PYX	122, 83	Sodium nitrate	97	Tetrabromobisphenol A bis(hydroxyethyl) ether	36	2,3',4,4'-Tetrachlorobiphenyl	212
Potassium monopersulfate triple salt	260	PYX(2,6-bis,bis-(picrylamine)-3,5-dinitropyridine	239	Sodium nitrite	97, 102	Tetrabromobisphenol A bisglycidyl ether	37	2,3',4,4'-Tetrachlorobiphenyl	4
Potassium n-hydroxymethyl-n-methyl dithiocarbamate	59			Sodium persulfate	260	Tetrabromobisphenol A bis(hydroxyethyl) ether	36	2,3',4,5'-Tetrachlorobiphenyl	4
Potassium nitrate	97	Quaternium-15	101, 260	Sodium propionate	97	Tetrabromobisphenol A bis(methyl) ether	36	2,3',4,6'-Tetrachlorobiphenyl	4
Potassium nitrite	97	Quinalphos	60	Sodium sulphate	260	Tetrabromobisphenol A diallyl ether	36	2,3',4',5'-Tetrachlorobiphenyl	4
Potassium perfluorooctanesulfonate	107	Quinlorac	60	Sodium tetraborate	260	Tetrabromobisphenol S	36	2,3',4',6'-Tetrachlorobiphenyl	4
Potassium permanganate	260	Quinmerac	60	Solvent Orange 7	105	Tetrabromobisphenol S bis(2,3-dibromopropyl) ether	36	2,3',5,5'-Tetrachlorobiphenyl	4
Potassium sorbate	97, 101, 103, 260	Quinoclamine	60	Solvent Red 19	105	Tetrabromobisphenol S bisglycidyl ether	37	2,3',5,6'-Tetrachlorobiphenyl	4
Potassium sulfite	260	Quinolone	40, 92	Solvent Red 23	105	Tetrabromobisphenol S bis(methyl) ether	37	2,4,4',5'-Tetrachlorobiphenyl	4
p-Phenylenediamine	76, 122, 197	Quinoxifen	60	Solvent Red 24	105	1,2,5,6-Tetrabromocyclooctane	36	2,4,4',6'-Tetrachlorobiphenyl	4
Prallethrin	59, 260	Quinoxalop ethyl	60, 123	Solvent Red 26	297	1,2,3,7-Tetrabromodibenzo-p-dioxin	21	2,4,4',6'-Tetrachlorobiphenyl	4
Praseodymium	329, 332, 377			Solvent Yellow 1	105	1,2,3,7-Tetrabromodibenzo-p-dioxin	21	3,3',4,4'-Tetrachlorobiphenyl	4
Prebabe	59, 122			Solvent Yellow 14	105	2,3,7,8-Tetrabromodibenzo-p-dioxin	21, 23	3,3',4,5'-Tetrachlorobiphenyl	4
Pretlachlor	59	RDX	123, 83, 239	Sorbic acid	97, 260	Tetrabromodibenzo-p-dioxin-Mixed Isomers	21	3,3',4,5'-Tetrachlorobiphenyl	4
Primsulfuron-methyl	59	Regular Leaded Gasoline	307	Spinosad	60	2,2',3,3'-Tetrabromodiphenyl ether	26	3,3',5,5'-Tetrachlorobiphenyl	4
Probenazole	59	Regular unleaded gasoline	322	Spinosad (Tech)	260	2,2',3,4'-Tetrabromodiphenyl ether	26	3,3',4,5'-Tetrachlorobiphenyl	4
Prochloraz	59	Regular Unleaded Gasoline	320	Spirodiclofen	60	2,2',3,4'-Tetrabromodiphenyl ether	26	Tetrachlorobisphenol A	38
Procyimidone	59	Resimene® 3520	89	Spiromesifen	60	2,2',3,5'-Tetrabromodiphenyl ether	26	1,2,3,4-Tetrachlorodibenzofuran	23
Prodimine	59	Resmethrin	60	Spiroteramat	60	2,2',3,5'-Tetrabromodiphenyl ether	26	1,3,6,8-Tetrachlorodibenzofuran	23
Profenofos	59, 122	Resmethrin	60	Spiroxamine	60	2,2',3,6'-Tetrabromodiphenyl ether	26	2,3,7,8-Tetrachlorodibenzofuran	23
Profluralin	59, 122	Resorcinol	101	Stearic acid	89	2,2',3,6'-Tetrabromodiphenyl ether	26	1,2,3,4-Tetrachlorodibenzo-p-dioxin	21
Prohexadione-calcium	59	Resorcinol bis(diphenyl phosphate)	38	Stearic acid RG (rubber grade)	91	2,2',4,4'-Tetrabromodiphenyl ether	89	1,2,6,7-Tetrachlorodibenzo-p-dioxin	21
Promecarb	59, 122	Retarder AK	90	Stearic acid TP	91	2,2',4,4'-Tetrabromodiphenyl ether	26	1,2,6,8-Tetrachlorodibenzo-p-dioxin	21
Prometon	59, 65, 122, 174	RFA Gasoline	277, 285, 307, 308	Searyl stearate	253, 310	2,2',4,5'-Tetrabromodiphenyl ether	26	1,2,7,8-Tetrachlorodibenzo-p-dioxin	21
Prometryn	174	Rhodamine B	105	Stirophos	123	2,2',4,5'-Tetrabromodiphenyl ether	26	1,2,8,9-Tetrachlorodibenzo-p-dioxin	21
Prometryne	59, 65, 122, 260	Rimsulfuron	60	Stoddard	308	2,2',4,6'-Tetrabromodiphenyl ether	26	1,3,6,8-Tetrachlorodibenzo-p-dioxin	21
Pronamide	59, 122, 197	Ronnel	60, 123	Stoddard solvent	308	2,2',4,6'-Tetrabromodiphenyl ether	26	1,3,7,8-Tetrachlorodibenzo-p-dioxin	21
Propachlor	59, 122	Rotenone	60, 123, 180, 260	Strobane	60	2,2',5,5'-Tetrabromodiphenyl ether	26	1,3,7,9-Tetrachlorodibenzo-p-dioxin	21
Propacarb	59	Rubidium	329, 332	Strobon	329, 332, 333, 338, 377	2,2',5,6'-Tetrabromodiphenyl ether	26	2,3,7,8-Tetrachlorodibenzo-p-dioxin	21, 173
Propacarb hydrochloride	59	Ruthenium	329, 332	Styrene	70, 123, 124, 197, 107, 221	2,2',6,6'-Tetrabromodiphenyl ether	26	3,3',4,4'-Tetrachlorodiphenyl ether	20
Propanal	72, 122			Succinate	335	2,3,3',4'-Tetrabromodiphenyl ether	26	1,1,1,2-Tetrachloroethane	70, 123, 197, 203, 221
Propanal-DNPH	122, 164	SAE 10W30 Motor oil	308	Sudan II	105	2,3,3',4'-Tetrabromodiphenyl ether	26	1,1,2,2-Tetrachloroethane	70, 123, 197, 203, 221
1-Propanamine	76	SAE 10W40 Motor oil	308	Sulconitrone	60	2,3,3',5'-Tetrabromodiphenyl ether	26	Tetrachloroethene	70, 123, 203, 221, 246
1,2-Propanediol	69	SAE 20W50 Motor oil	308	Sulfallate	60	2,3,3',5'-Tetrabromodiphenyl ether	26	Tetrachloroethylene	197
1-Propanethiol	287	SAE 30W Motor oil	308	Sulfaginoxaline	60	2,3,3',6'-Tetrabromodiphenyl ether	26	Tetrachloro-m-xylene	70, 212
2-Propanethiol	287	SAE 50W Motor oil	308, 315	Sulfentrazone	60	2,3,4,4'-Tetrabromodiphenyl ether	26	1,2,3,4-Tetrachloronaphthalene	19
Propanil	59, 122, 179	SAE 40W Motor oil	308, 315	Sulfometuron methyl ester	60	2,3,4,5-Tetrabromodiphenyl ether	26	2,3,4,5-Tetrachloronitrobenzene	44
1-Propanol	71, 122, 202, 260	Sulfosulfuron	60	Sulfosulfuron	60	2,3,4,6-Tetrabromodiphenyl ether	26	2,3,5,6-Tetrachloronitrobenzene	44, 61, 123
Propaquizafop	59	Sulfotep	60, 123, 217	Sulfotep	60, 123, 217	2,3,4,5-Tetrabromodiphenyl ether	26	2,3,4,5-Tetrachlorophenol	74
Propargite	59, 122	SAE 5W30 Motor oil	308	Sulfoxide	60, 123	2,3,4,6-Tetrabromodiphenyl ether	26	2,3,4,6-Tetrachlorophenol	74, 123, 197
Propargyl alcohol	71	Saflufenacil	60	Sulfur	270, 301, 305, 329, 332, 333	2,3,5,6-Tetrabromodiphenyl ether	26	2,3,5,6-Tetrachlorophenol	74
Propazine	59, 65, 122, 174	Safrole	123, 197	Sumithrin	61, 123, 260	2,3,4,4'-Tetrabromodiphenyl ether	26	Tetrachlorosalicylanilide	102
Propetamphos	59	Saicylic acid	102, 260	Swap	61, 123, 179	2,3,4,5-Tetrabromodiphenyl ether	26	Tetrachlorovinphos	61, 123, 249
Propham	59, 122, 179	Santanox R	91	Symclosene	260	2,3,4,5-Tetrabromodiphenyl ether	26	Tetraconazole	61
Propiconazole	260	Santicizer® 141	90	sym-Trinitrobenzene	197, 228	2,3',4,6'-Tetrabromodiphenyl ether	26	Tetracosane	308
Propineb	59	Santicizer 148	90			2,3',4,5-Tetrabromodiphenyl ether	26	n-Tetracosane	282
Propionate	335	Santicizer 160	90			2,3',4,6-Tetrabromodiphenyl ether	26	Tetradecachloro-m-terphenyl	19, 20, 89, 148
Propionic acid	69, 97	Santicizer 261	90			2,3',5,5'-Tetrabromodiphenyl ether	26	Tetradecachloro-o-terphenyl	19, 20, 89, 148
Propionitrile	69, 122, 197, 202	Santicizer® 278	90			2,3',5,6-Tetrabromodiphenyl ether	26	Tetradecachloro-p-terphenyl	19, 20, 89, 148
Propoxur	179, 260	Santoflex 77PD	87			2,4,4,5-Tetrabromodiphenyl ether	26	n-Tetradecane	308
Propoxy carbazone-sodium	59	Santoflex® IPPD	87			2,4,4,6-Tetrabromodiphenyl ether	26	Tetradecylbenzene	70
n-Propylbenzene	70, 122, 203, 221	Saytex BT-93	37			2,3,4,5-Tetrabromodiphenyl ether	27	Tetraflon	61, 123
Propylene glycol	101	S-Bioallethrin	48			3,3',4,4'-Tetrabromodiphenyl ether	27, 29	2,3,6',7-Tetraethylbiphenylene	40
Propylene glycol dinitrate	122, 83	Schradan	60			3,3',4,5-Tetrabromodiphenyl ether	27	Tetraethyl dihioprophosphate	197
Propylenehiourea	59	Scotchgard™ Post-2002	107			3,3',5,5'-Tetrabromodiphenyl ether	27	Tetrafluoroethane	123, 103, 108
Propyl paraben	101, 103	Scotchgard™ Pre-2002	107			3,4,4,5-Tetrabromodiphenyl ether	27	1,1,2,2-Tetrafluoroethane	123, 108
Di-n-propyl phthalate	78	Sebuthyllazine	65			3,4,4,5-Tetrabromodiphenyl ether	27	3,4,5,6-Tetrahydro-2-pyrimidinethiol (THP)	149
Di-n-propyl phthalate-3,4,5,6-d4	91, 79	Secbumeton	60, 123, 174			Tetrabromo-o-chlorotoluene	37	1,2,3,4-Tetrahydrofluoranthene	40
Proquinazid	59	Sethoxydim	60			2,3,4,5-Tetrabromophenol	35, 205	2,3,4,6-Tetrahydrophenol	70, 123, 194
Prosulcarb	59	SF100	87			2,3,4,6-Tetrabromophenol	35, 205	1,2,3,6-Tetrahydrophthalimide	61
Prosulfluron	59	Siduron	60, 123, 179			2,3,5,6-Tetrabromophenol	35, 205	cis-04-Tetrahydrophthalimide	61
Prothioconazole	59	Silaflufen	60			Tetrabromothallic acid	36	Trakris(2-chloroethyl)dichloroisopentylidiphosphate	38
						1,2,3,4-Tetrachloro-5-nitrobenzene	61	Tramethrin	61, 260

Organic Analyte Index

1,2,3,4-Tetramethylbenzene	70	2,4,5-Tribromoanisole	35, 205	Trichloroethene	70, 124, 203, 221, 246	Triphenylphosphate	62, 124
1,2,3,5-Tetramethylbenzene	70	2,4,6-Tribromoanisole	35, 205	Trichloroethylene	197	Triphenyltin chloride	62
1,2,4,5-Tetramethylbenzene	70	1,3,5-Tribromobenzene	70, 124, 216	Trichlorofluoromethane	70, 103, 108, 124, 221	Tripropyl phosphate	38
3,3',5,5'-Tetramethylbenzidine	76	2,2',5-Tribromobiphenyl	34	Bis(trichloromethyl) sulphone	257	Tritetradecanoin	94
3,3',5,5'-Tetramethylbenzidine	106	2,3',5-Tribromobiphenyl	34	Trichloronate	62, 124	Triticinazole	62
Tetramethylene sulfone	302	2,4,5-Tribromobiphenyl	34	2,3,4-Trichloronitrobenzene	44	Truxene	40
4,4',6,6'-Tetranitro-2,2'-azobenzene	83, 239	2,4,6-Tribromobiphenyl	34	2,4,5-Trichloronitrobenzene	44	Tungsten	330, 332
2,2',6,6'-Tetranitro-4,4'-azobenzene	83, 239	2,4',5-Tribromobiphenyl	34	2,3,4-Trichlorophenol	74	Turbine (Jet A) Fuel	308
2,2',6,6'-Tetranitro-4,4'-azobenzene	83, 239	1,3,7-Tribromodibenzo-p-dioxin	21	2,3,5-Trichlorophenol	74	Turbine (Jet) fuel	308
Tetra-n-propyl tin	238	1,3,8-Tribromodibenzo-p-dioxin	21	2,3,6-Trichlorophenol	74	Turpentine	308
Tetrapentyltin	238	2,2',3-Tribromodiphenyl ether	26	2,4,5-Trichlorophenol	74, 124, 138, 197, 210		
Tetrasul	61	2,2',4-Tribromodiphenyl ether	26	2,4,6-Trichlorophenol	62, 74, 124, 162, 185, 186, 188, 197		
Tetrayl	123, 83, 239	2,2',5-Tribromodiphenyl ether	26	2,4,6-Trichlorophenol sodium salt	260	Ultrinox® 626	88
Thallium	330, 332, 333, 377	2,2',6-Tribromodiphenyl ether	26	2,4,5-Trichlorophenol	74, 124, 186	Ultrinox 626	91
Thiabendazole	61, 123, 180, 260	2,3,3-Tribromodiphenyl ether	26	2,4,5-Trichlorophenoxy acetic acid	197	Undecan-2-one (Methyl-nonyl-ketone)	260
Thiacloprid	61	2,3,4-Tribromodiphenyl ether	26	2,3,4-Trichlorophenyl-4-nitrophenyl ether	77, 216	Undecylbenzene	70
Thiamethoxam	61, 260	2,3,5-Tribromodiphenyl ether	26	2,3,5-Trichlorophenyl-4-nitrophenyl ether	77, 216	Unichlor™ 40-90	38
Thianaphthene	40	2,3,6-Tribromodiphenyl ether	26	2,3,6-Trichlorophenyl-4-nitrophenyl ether	77, 216	Unichlor™ 502-50	38
Thianthrene	40	2,3',4-Tribromodiphenyl ether	26	2,4,5-Trichlorophenyl-4-nitrophenyl ether	77, 216	Unichlor™ 70AX	38
Thiazopyr	61	2,3',5-Tribromodiphenyl ether	26	2,4,6-Trichlorophenyl-4-nitrophenyl ether	77, 216	Uniconazole	63
Thiazuron	61	2,3',6-Tribromodiphenyl ether	26	3,4,5-Trichlorophenyl-4-nitrophenyl ether	77, 216	Unleaded Gasoline	308
Thiensafluron methyl	61	2,4,4-Tribromodiphenyl ether	26	N,N-bis(2,4,6-Trichlorophenyl)urea	23	Uvinul® 3000	91
Thiufazamide	61	2,4,5-Tribromodiphenyl ether	26	1,1,2-Trichloropropane	70, 124	Uvinul 3008	91
Thimerosal	102	2,4,6-Tribromodiphenyl ether	26	1,2,3-Trichloropropane	70, 124, 162, 163, 197, 203, 221	Uvinul 3040	91
Thiobencarb	61, 123	2,4',5-Tribromodiphenyl ether	26	a.a.a-Trichlorotoluene	70, 124, 175		
bis(thiobenzoyl) disulfide	90	2,4',6-Tribromodiphenyl ether	26	1,1,1-Trichlorotrifluoroethane	108		
Thiocyclam hydrogen oxalate	61	2',3,4-Tribromodiphenyl ether	26	Triclocarban	260	Vaccenin	94
4,4'-Thiodianiline	106	2,3,5-Tribromodiphenyl ether	26	Triclopgr	62, 124	Vacor	63, 124, 179
4,4'-Thiodianiline	76	3,3',4-Tribromodiphenyl ether	26	Triclopgr-2-butoxy ethyl ester	62	Vamidithion	63
Thiodicarb	62	3,4,4-Tribromodiphenyl ether	26	Triclopgr methyl ester	62, 124	Vanicide-20S	63
4,4'-Thiodiphenol	62, 123	3,4,5-Tribromodiphenyl ether	26	Triclosan	260	Verbena oil	102
Thiofanox	62, 123	3,4',5-Tribromodiphenyl ether	26	cis-Tricos-9-ene	260	Vermolate	63, 124
Thiofanox sulfone	62	Tribromoneopentyl alcohol	36	Tricresyl phosphate	38, 62, 124	Victoria Blue	105, 106
Thiofanox sulfoxide	62	tris(tribromoneopentyl) phosphate	38	Tricyclazole	62, 124	Vinclozolin	63, 124
Thiometon	62	tris(Tribromoneopentyl) phosphate	36	n-Tridecane	308	Vinsol® powder	90
Thionazin	62, 123, 197	2,3,4-Tribromophenol	35, 205	Tridecanoin	94	Vinsol resin	90
Thiophanate	62, 123	2,3,5-Tribromophenol	35	Tridecylbenzene	70	Vinyl acetate	70, 124, 197
Thiophanate-methyl	62	2,3,6-Tribromophenol	35, 205	Tridemorph	62	Vinyl chloride	70, 124, , 197, 102, 221
Thiophene	287	2,4,5-Tribromophenol	35, 205	Tridocosanoin	94		
Thiram	62, 123, 260	2,4,6-Tribromophenol	35, 37, 74, 124, 135, 172, 177, 205, 214	Tridodecanoin	94		
Thiuram	102	2,4,6-Tribromophenol-PFB	124, 172	11-14 cis Tricicosadienoin	94	Warfarin	63, 260
THPS (Tech Grade)	260	3,4,5-Tribromophenol	35, 205	Tricicosanoin	94	Warfarin sodium	260
Tillam	62, 123	2,4,6-tris(2,4,6-Tribromophenoxy)-1,3,5-triazine	36	Tricosenoin	94		
Tilt	62, 123	1,2-bis(2,4,6-Tribromophenoxy)ethane	36	Trielaidin	94		
Timbasol Brown trans oxide	105	2,4,6-Tribromophenyl allyl ether	36	Trielazine	62		
Tinuvin P	91	Tributyl phosphate	38	Triethanolamine	102	XMC	63
TNT	83, 123, 239	Tributylphosphate	124, 90	Triethyl phosphate	38	Xylene	124, 197
Tokuthion	62, 123	Tributyltetradecylphosphonium chloride	260	Triethylphosphate	62, 124, 89	m-Xylene	70, 124, 107, 221
Tolclofos-methyl	62	bis(Tributyltin)oxide	62	o,p,o-Triethylphosphorothioate	62, 124, 197	o-Xylene	70, 124, 203, 221
Tolclofos-methyl	62	Tricaprin	300, 304	Trifenmorph	62	p-Xylene	70, 124, 203, 221
Tolnafate	260	Trichloron	62, 124	Trifloxystrobin	62	Xylene (total)	70
m-Tolualdehyde-DNPH	72, 123	1,1,2-Trichloro-1,2,2-trifluoroethane	124, 103, 108	Triflumizole	62		
o-Tolualdehyde-DNPH	72, 123	1,1,1-Trichloro-2-propanone	72, 124	Triflururon	62, 260		
p-Tolualdehyde-DNPH	72, 123	3,5,6-Trichloro-2-pyridinol	62	2,4',5-Trifluoroacetophenone	124, 164	Zinc borate (Tech)	260
Toluene	70, 107, 123, 124, 197, 221, 291	Trichloroacetic acid	62, 77, 124, 162, 163	2,4',5-Trifluoroacetophenone	72	Zinc phosphide	63
Toluene-d8	70	Trichloroacetone	70, 124	1,1,1-Trifluoroethane	124, 108	Zinc pyrrhione	260
2,4-Toluene diisocyanate	296	2,4,5-Trichloroaniline	76	Trifluoromethane	103, 108, 124	Zinc sulfide	260
2,6-Toluene diisocyanate	296	2,4,6-Trichloroanisole	107	a.a.a-Trifluorotoluene	124	Zinc sulfide	260
o-Toluidine	43, 76, 123, 124, 197, 106	1,2,3-Trichlorobenzene	62, 70, 124, 203, 221	_____-Trifluorotoluene	146, 171	Zineb	63, 260
Tolyfluamide	62	1,2,4-Trichlorobenzene	62, 70, 124, 203, 216, 221	Trifluralin	62, 124	Ziram	63, 124, 260
Tolyfluamide	260	1,3,5-Trichlorobenzene	70	Trifluralin	62, 124	Zirconium	102, 103, 329, 330, 331, 332
1,3-Di-o-tolylguanidine	87	2,3,5-Trichlorobenzoic acid	62, 124	Trifluralin-methyl	62	Zoxamide	63
Toxaphene	62, 64, 123, 138, 153, 154, 166, 174, 177, 197, 207, 226	2,3,4-Trichlorobiphenyl	3	Triflorine	62		
2,4,5-TP	123, 174, 219	2,2',3-Trichlorobiphenyl	3	Trifluorobenzene	94		
2,4,5-TP methyl ester	123	2,2',4-Trichlorobiphenyl	3	2,3,5-Triiodobenzoic acid	62, 124		
2,4,5-TP-PFB	123, 219, 181	2,2',4-Trichlorobiphenyl	3	Triisopropyl phosphate	38		
TP-69	37	2,2',4-Trichlorobiphenyl	3	Tri-m-cresyl phosphate	38		
Tralkoxydim	62	2,2',5-Trichlorobiphenyl	3, 212	Trimellitate	90		
Tralometrin	62	2,2',6-Trichlorobiphenyl	3	2,3,5-Trimethacarb	62, 124		
trans-1,2-Dichloroethene	68, 118, 203, 221	2,3,3-Trichlorobiphenyl	3	3,4,5-Trimethacarb	62, 124		
trans-1,3-Dichloropropene	68, 118, 196, 203, 221	2,3,4-Trichlorobiphenyl	3	2,2,4-Trimethyl-1,3-pentanediol-isobutyrate	90		
trans-1,4-Dichloro-2-butene	68, 117, 196	2,3,5-Trichlorobiphenyl	3	2,4,5-Trimethylaniline	76, 106		
trans-1,2-Dichloroethylene	196	2,3,6-Trichlorobiphenyl	3	4,6,8-Trimethylazulene	40		
trans-2, cis-6-Nonadienal	107	2,3',4-Trichlorobiphenyl	3	8,9,11-Trimethylbenz[a]anthracene	40		
trans-2-Heptenal	100, 102	2,3',5-Trichlorobiphenyl	3	1,2,3-Trimethylbenzene	70, 291, 292, 293, 308, 320, 321		
trans-2-Hexenal diethyl acetal	100, 102	2,3',6-Trichlorobiphenyl	3	1,2,4-Trimethylbenzene	70, 124, 203, 221		
trans-2-Hexenal dimethyl acetal	100, 102	2,4,4-Trichlorobiphenyl	3	1,3,5-Trimethylbenzene	70, 124, 203, 221		
Transluthrin	62, 260	2,4,5-Trichlorobiphenyl	3	Trimethylolethane trinitrate	83, 239		
trans-Nonachlor	58, 121	2,4,6-Trichlorobiphenyl	212	Trimethyl phosphate	38, 62, 124		
Tree Moss extract	102	2,4',5-Trichlorobiphenyl	3	Trimethylsulfonium iodide	62		
1,2,3,8-Tetrabromodibenzo-p-dioxin	21	2',3,4-Trichlorobiphenyl	3	Trimidal	62		
Tri(2-isopropylphenyl) phosphate	38	2,3,5-Trichlorobiphenyl	3	Trinexapac-ethyl	62		
Tri(3-chloropropyl) phosphate	38	3,3',4-Trichlorobiphenyl	3	2,4,7-Trinitro-9-fluorenone	42		
Triacetone triperoxide	239	3,3',5-Trichlorobiphenyl	3	1,3,5-Trinitrobenzene	70, 124, 83, 239		
n-Triacontane-d62	308, 315, 316, 323	3,4,4-Trichlorobiphenyl	3	2,4,6-Trinitroresorcinol	83, 239		
Triadimefon	62, 123	3,4,5-Trichlorobiphenyl	3	Tri-n-propyltin chloride	238		
Triadimenol	62	3,4',5-Trichlorobiphenyl	3	Tri-o-cresyl phosphate	38		
Triallate	62, 123	2,4,8-Trichlorodibenzofuran	23	Tricetadecanoin	94		
1,3,5-Triamino-2,4,6-trinitrobenzene	83, 239	1,2,3-Trichlorodibenzo-p-dioxin	21	Triclanoin	94		
2,4,6-Triaminotoluene trihydrochloride	83, 239	1,2,4-Trichlorodibenzo-p-dioxin	21	Triolein	300, 304		
Triasulfuron	62	1,7,8-Trichlorodibenzo-p-dioxin	21	Tri-p-cresyl phosphate	38		
s-Triazine	43, 44	2,3,7-Trichlorodibenzo-p-dioxin	21	Triphenyl phosphate	38		
1,2,4-Triazole	62, 123	1,1,1-Trichloroethane	70, 124, 197, 203, 221, 246	Triphenyltin chloride	238		
Triazophos	62, 123	1,1,2-Trichloroethane	70, 124, 197, 203, 221	Triphenylene	40		
Tribenuron-methyl	62			Triphenyl phosphate	38, 147		
Tribromsalan	102						
Tribromoacetic acid	77, 123, 163						

Catalog Number Index

A-001	67	AA64W-5	333	AG-INT-ASL-1	362	ALR-033S-ET-10X	99, 102	ALR-098N	78, 99	ALR-150S	101
		AA67N-1	333	AG-INT-ASL-5	362	ALR-034N	99	ALR-098S	78, 99, 103	ALR-152N	101
		AA67N-5	333	AG-INTFR2-6020-ASL-1	362	ALR-034S-A-10X	99, 102	ALR-099N	99	ALR-152S	101, 103
		AA69N-1	333	AG-INTFR2-6020-ASL-5	362	ALR-038N	99	ALR-099S	78, 99, 103	ALR-153N	101
		AA69N-5	333	AG-INTFR-6020-ASL-1	362	ALR-038S-ET-10X	99, 102	ALR-100N	78, 99	ALR-153S	101, 103
A-003	68	AA70N-1	333	AG-INTFR-6020-ASL-5	362	ALR-040N	99	ALR-100S	78, 99, 103	ALR-154S	101
A-004	68	AA70N-5	333	AG-INTSTD-ASL-1	361	ALR-040S-A-10X	99, 102	ALR-101N	80, 99	ALR-155N	101
A-005	70	AE-00010	249	AG-INTSTD-ASL-5	361	ALR-041N	99	ALR-101S	80, 99, 103	ALR-155S-CN	101, 103
A-006	70	AE-00010-10ML	249	AG-MECAL-1-ASL-1	362	ALR-041S-ET-10X	99, 102	ALR-102N	80, 99	ALR-156N	101
A-007	70	AE-00011	249	AG-MECAL-1-ASL-5	362	ALR-042N	99	ALR-102S	80, 99, 103	ALR-156S	101
A-008	70	AE-00011-10ML	249	AG-MECAL2A-ASL-1	362	ALR-042S-ET-10X	99, 102	ALR-103N	80, 99	ALR-157N	101
A-009	70	AE-00012	249	AG-MECAL2A-ASL-5	362	ALR-044N	100	ALR-103S	80, 99, 103	ALR-157S	101
A-010	70	AE-00012-10ML	249	AG-MECAL3-ASL-1	362	ALR-044S-CN-10X	100, 102	ALR-104N	99	ALR-158N	101
A-011	69	AE-00013	249	AG-MECAL3-ASL-5	362	ALR-045N	100	ALR-104S	99, 103	ALR-158S	101
A-012	19, 69	AE-00013-10ML	249	AG-MECAL4-ASL-1	362	ALR-045S-ET-10X	100, 102	ALR-105N	99	ALR-159N	102
A-013	73	AE-00014	249	AG-MECAL4-ASL-5	362	ALR-046N	100	ALR-105S	99, 103	ALR-159S	102
A-014	73	AE-00014-10ML	249	AG-SPIKE-ASL-R1-1	361	ALR-046S-10X	100, 102	ALR-106N	99	ALR-160N	101
A-015	73	AE-00015	249	AG-SPIKE-ASL-R1-5	361	ALR-047N	100	ALR-106S	99	ALR-160S-W	102
A-016	73	AE-00015-10ML	249	AG-TUN1-ASL-1	361	ALR-047S-ET-10X	100, 102	ALR-107N	99	ALR-161N	102
A-017	73	AE-00016	249	AG-TUN1-ASL-5	361	ALR-048N	100	ALR-107S	99	ALR-162N	102
A-018	73	AE-00016-10ML	249	AG-TUN2-ASL-1	361	ALR-048S-ET-10X	100, 102	ALR-109N	99	ALR-162S	102
A-019	73	AE-00017	249	AG-TUN2-ASL-5	361	ALR-050N	100	ALR-109S	99	ALR-163N	102
A-020	73	AE-00017-10ML	249	AG-TUN-ASL-1-SET	361	ALR-050S-CN-10X	100, 102	ALR-110N	99	ALR-163S	102
A-021	73	AE-00018	249	AG-TUN-ASL-5-SET	361	ALR-051S-CN-10X	100, 102	ALR-110S	99, 103	ALR-164N	102
A-022	74	AE-00018-10ML	249	AG-TUNSTOCK1-ASL-1	361	ALR-052N	100	ALR-111N	99	ALR-164S	102
A-023	74	AE-00019	249	AG-TUNSTOCK1-ASL-5	361	ALR-052S-CN-10X	100, 102	ALR-111S	99, 103	ALR-165N	80
A-024	74	AE-00019-10ML	249	AG-TUNSTOCK-ASL-1	361	ALR-053N	101	ALR-113N	99	ALR-165S	80
A-025	74	AE-00020	250	AG-TUNSTOCK-ASL-5	361	ALR-053S-10X	101, 102	ALR-113S	99, 103	ALR-167N	102
A-026	74	AE-00020-10ML	250	AG-VER1-ASL-R1-1	361	ALR-054N	101	ALR-114N	99	ALR-167S	102
A-027	74	AE-00021	250	AG-VER1-ASL-R1-5	361	ALR-054S-CN-10X	101, 102	ALR-114S	99	ALR-168N	102
A-028	74	AE-00021-10ML	250	AK-101.0-IS-10X	307	ALR-055N	101	ALR-114S-CN	100	ALR-168S	102
A-029-10MG	74	AE-00022	250	AK-102.0-LCS	307	ALR-055S-CN-10X	101, 102	ALR-115S-W	100	ALR-169N	100
A-030	74	AE-00022-10ML	250	AK-102.0-LCS-10X	307	ALR-056S-CN-10X	102	ALR-117N	100	ALR-169S	100
A-031	74	AE-00023	250	AK-102.0-SS	308	ALR-058N	101	ALR-117S	100, 103	ALR-170S	102
AA01N-1	333	AE-00023-10ML	250	AK-102.0-SS-10X	308	ALR-058S-CN-10X	101, 102	ALR-118N	100	ALR-171N	100
AA01N-5	333	AE-00024	250	AK-102-LCS-R1-10X	307	ALR-060N	102	ALR-118S	100	ALR-171S	100
AA02N-1	333	AE-00024-10ML	250	AK-103.0-LCS	308	ALR-060S-ET-10X	102	ALR-119S-CN	100	ALR-172N	100
AA02N-5	333	AE-00025	247	AK-103.0-LCS-5X	308	ALR-061N	101	ALR-120N	100	ALR-172S	100
AA03N-1	333	AE-00025-10ML	247	AK-103.0-SS	308	ALR-061S-ET-10X	101, 102	ALR-120S	100	ALR-173N	102
AA03N-5	333	AE-00027	250	AK-103.0-SS-10X	308	ALR-062N	99	ALR-121N	100	ALR-173S-W	102
AA04N-1	333	AE-0027-10ML	250	ALR-001N	98	ALR-062S	99	ALR-121S	100, 103	ALR-174N	100
AA04N-5	333	AE-00028	250	ALR-001S-CN-10X	98, 102	ALR-063N	99	ALR-122N	100	ALR-175N	79
AA07W-1	333	AE-00028-10ML	250	ALR-002N	98	ALR-063S	99	ALR-122S	100, 103	ALR-175S-CN	79
AA07W-5	333	AE-00029	250	ALR-002S-ET-10X	98, 102	ALR-064N	99	ALR-123N	100	ALR-176N	79
AA08N-1	333	AE-00029-10ML	250	ALR-003N	99	ALR-064S	99	ALR-123S-A	100	ALR-176S-CN	79
AA08N-5	333	AE-00030	250, 252	ALR-003S-ET-10X	99, 102	ALR-065N	99	ALR-127N	101	ALR-177N	79
AA09N-1	333	AE-00030-10ML	250, 252	ALR-004N	99	ALR-065S	99	ALR-127S	101	ALR-177S-CN	79, 101
AA09N-5	333	AE-00031	251, 252	ALR-004S-CN-10X	99, 102	ALR-066N	98	ALR-128N	100	ALR-178N	79
AA13N-1	333	AE-00031-10ML	251, 252	ALR-005N	100	ALR-066S	98	ALR-128S	100	ALR-178S-CN	79
AA13N-5	333	AE-00032	247	ALR-005S-ET-10X	100, 102	ALR-067N	98	ALR-129N	101	ALR-179N	79
AA14N-1	333	AE-00032-10ML	247	ALR-006N	100	ALR-067S	98	ALR-129S	101	ALR-179S-CN	79
AA14N-5	333	AE-00033	247	ALR-006S-CN-10X	100, 102	ALR-068N	99	ALR-130N	101	ALR-CFC-001S-2X	100, 103
AA15N-1	333	AE-00033-10ML	247	ALR-007N	100	ALR-068S	99	ALR-130S	101, 103	ALR-CFC-002S-2X	100, 103
AA15N-5	333	AE-00039-CAL-SET	246	ALR-007S-ET-10X	100, 102	ALR-069N	100	ALR-132N	101	ALR-CFC-003S-2X	100, 103
AA22H-1	333	AE-00040-CAL-SET	246	ALR-008S-ET-10X	98, 102	ALR-069S-CN	100, 103	ALR-132S	101	ALR-CFC-004S-2X	100, 103
AA22H-5	333	AE-00043	253	ALR-009N	98	ALR-070S-R1	99	ALR-133N	101	ALR-CFC-005S-2X	100, 103
AA27N-1	333	AE-00044	253	ALR-009S-CN-10X	98, 102	ALR-072N	100	ALR-133S	101	ALR-CFC-006S-2X	100, 103
AA27N-5	333	AE-00045	247	ALR-010N	99	ALR-072S	100	ALR-134N	79, 101	ALR-CFC-007S-2X	100, 103
AA29N-1	333	AE-00045-10ML	247	ALR-010S-CN-10X	99, 102	ALR-073N	101	ALR-134S-CN	79, 101, 103	ALR-CFC-008S-2X	100
AA29N-5	333	AE-00046	72, 253	ALR-011N	99	ALR-073S	101, 103	ALR-135N	79, 101	ALR-CFC-009S-2X	100, 103
AA30N-1	333	AE-00047	123, 249	ALR-011S-CN-10X	99, 102	ALR-074N	98	ALR-135S-CN	79, 101, 103	ALR-CFC-010S-2X	100, 103
AA30N-5	333	AE-00048	246	ALR-012N	100	ALR-074S	98	ALR-136N	101	ALR-CFC-011S-2X	100, 103
AA32N-1	333	AE-00049-R1	248, 106	ALR-012S-ET-10X	100, 102	ALR-075N	101	ALR-136S	101	ALR-CFC-012S-2X	100, 103
AA32N-5	333	AE-00049-R1-10ML	106	ALR-013N	100	ALR-075S	101	ALR-137N	79, 101	ALR-CFC-013S-2X	100
AA33N-1	333	AE-00049-SET	248, 106	ALR-013S-CN-10X	100, 102	ALR-078N	98	ALR-137S-CN	79, 101, 103	ALR-CFC-014S-2X	100, 103
AA33N-5	333	AE-00050	251	ALR-014N	98	ALR-078S	98	ALR-138N	79, 101	ALR-CFC-015S-2X	100, 103
AA34N-1	333	AE-00050-10ML	251	ALR-014S-ET-10X	98, 102	ALR-079N	98	ALR-138S-CN	79, 101, 103	ALR-CFC-SET	103
AA35W-1	333	AE-00051	251	ALR-015N	98	ALR-079S	98	ALR-139N	79, 101	ALR-EU26-R1-SET	102
AA35W-5	333	AE-00052	251	ALR-015S-ET-10X	98, 102	ALR-080N	98	ALR-139S-CN	79, 101, 103	ALR-EU36-R1-SET	102
AA37N-1	333	AE-00052-10ML	251	ALR-016N	100	ALR-080S	98	ALR-140N	101	ALR-MET-01S	98, 103
AA37N-5	333	AE-00053	251	ALR-016S-ET-10X	100, 102	ALR-081N	98	ALR-140S	101	ALR-MET-02S	99, 103
AA41W-1	333	AE-00053-10ML	251	ALR-017S-CN-10X	98, 102	ALR-081S-CN	98, 103	ALR-141N	79	ALR-MET-03S	99, 103
AA41W-5	333	AE-00054	251	ALR-018N	100	ALR-082N	78, 98	ALR-141S-CN	79	ALR-MET-04S	100, 103
AA42H-1	333	AE-00054-10ML	251	ALR-018S-ET-10X	100, 102	ALR-082S	78, 98, 103	ALR-142N	79	ALR-MET-05S	100, 103
AA42H-5	333	AE-00055	251	ALR-019N	98	ALR-083N	98	ALR-142S-CN	79	ALR-MET-06S	101, 103
AA43N-1	333	AE-00055-10ML	251	ALR-019S-ET-10X	98, 102	ALR-083S	98, 103	ALR-143N	79	ALR-MET-07S	101, 103
AA43N-5	333	AE-00056	251	ALR-020N	99	ALR-084N	98	ALR-143S-CN	79	ALR-MET-08S	102, 103
AA51N-1	333	AE-00056-10ML	251	ALR-020S-ET-10X	99, 102	ALR-084S	98	ALR-144N	101	ALR-MET-SET	103
AA51N-5	333	AE-00057	251	ALR-021S-ET-10X	100, 102	ALR-085N	98	ALR-144S	101, 103	ALR-PAR-SET	103
AA52W-1	333	AE-00057-10ML	251	ALR-022N	100	ALR-085S	98, 103	ALR-145N	100	ALR-PHT-SET	103
AA52W-5	333	AE-00059	245, 10	ALR-022S-ET-10X	100, 102	ALR-086S	98, 103	ALR-145S	100	ALR-SUN-SET	103
AA53N-1	333	AE-00059-10ML	245, 10	ALR-023N	101	ALR-087N	98	ALR-146N	101	AOCs-001N	95
AA53N-5	333	AE-00060	245, 10	ALR-023S-ET-10X	101, 102	ALR-087S	98	ALR-146S	101, 103	AOCs-002N	95
AA54N-1	333	AE-00060-10ML	245, 10	ALR-024S-CN-10X	99, 102	ALR-088N	98	ALR-147N	101	AOCs-003N	95
AA54N-5	333	AE-00061	245, 10	ALR-025S-ET-10X	102	ALR-088S	98	ALR-147S	101	AOCs-004N	95
AA55N-1	333	AE-00061-10ML	245, 10	ALR-026N	101	ALR-089N	98	ALR-149N-MW200	101	AOCs-005N	95
AA55N-5	333	AE-00081-10ML	245	ALR-026S-ET-10X	101, 102	ALR-089S	98	ALR-149N-MW400	101	AOCs-006N	95
AA56W-1	333	AG-CAL-1-ASL-1	362	ALR-027S-ET-10X	98, 102	ALR-090N	99	ALR-149N-MW600	101	AOCs-007N	95
AA56W-5	333	AG-CAL-1-ASL-5	362	ALR-028N	98	ALR-090S	99	ALR-149N-MW1500	101	AOCs-SET	95
AA60N-1	333	AG-CAL2-ASL-1	362	ALR-028S-ET-10X	98, 102	ALR-091N	99	ALR-149N-MW4000	101	AP-001N	97
AA60N-5	333	AG-CAL2-ASL-5	362	ALR-029N	98	ALR-091S	99	ALR-149S-MW200	101	AP-002N	97
AA63N-1	333	AG-CAL-ASL-1	362	ALR-029S-ET-10X	98, 102	ALR-094N	99	ALR-149S-MW400	101</		

Catalog Number Index

AP-007N	97	APP-9-057	196	APP-9-129-10X	72, 121	APP-9-204	70, 197, 246	AS-E0233	67	ASTM-E1618-PAK	303
AP-008N	97	APP-9-058	117, 196	APP-9-129-20X	72	APP-9-205	70, 197	AS-E0238	307	ASTM-P-0010-PAK	270
AP-009N	97	APP-9-059	117, 118, 23	APP-9-130	69, 121, 196, 201	APP-9-206	74, 197	AS-E0239	308	ASTM-P-0020-PAK	270
AP-010N	97	APP-9-059-2X	23	APP-9-130-20X	69	APP-9-207	74, 197	AS-E0240	308	ASTM-P-0030-R1	271
AP-011N	97	APP-9-060	196	APP-9-131	69, 121, 196	APP-9-207-50X	74	AS-E0241	307	ASTM-P-0031-R1	271
AP-012N	97	APP-9-061	196	APP-9-131-20X	69	APP-9-208	70, 197	AS-E0250	73	ASTM-P-0032-R1	271
AP-013N	97	APP-9-062	68, 196	APP-9-132	69, 121, 196	APP-9-208-10X	70, 162	AS-E0251	73	ASTM-P-0033-R1	271
AP-014N	97	APP-9-063	118, 119, 78	APP-9-133	121, 196	APP-9-208-10X-PAK	162	AS-E0252	73	ASTM-P-0034-R1	271
APP-9-001	114, 196	APP-9-063-10X	118, 78	APP-9-134	196	APP-9-209	197	AS-E0257	70	ASTM-P-0035-R1	271
APP-9-001-10X	114	APP-9-064	68, 196	APP-9-135	72, 121, 196	APP-9-210	70, 197	AS-E0258	69	ASTM-P-0050	273
APP-9-002	114, 196	APP-9-065	68, 196	APP-9-135-20X	72	APP-9-210-D-20X	70	AS-E0260	69	ASTM-P-0051N-2G	273, 298
APP-9-002-10X	114	APP-9-066	68, 196	APP-9-136	196	APP-9-211	70, 124, 197	AS-E0261	23	ASTM-P-0052	273
APP-9-003	72, 114, 196	APP-9-067	75, 117, 196	APP-9-137	121, 196	APP-9-211-20X	70	AS-E0263	75	ASTM-P-0052-PAK	273
APP-9-003-20X	72	APP-9-068	68, 117, 196	APP-9-138	121, 196	APP-9-212	70, 197	AS-E0271	44, 76	ASTM-P-0053N-2G	273, 298
APP-9-004	72, 114, 196	APP-9-068-20X	68	APP-9-139	121, 196	APP-9-213	70, 124, 197	AS-E0275	76	ASTM-P-0061-SET	287
APP-9-004-20X	72, 114	APP-9-069	68, 196	APP-9-140	76, 121, 196	APP-9-214	68, 196	AS-E0284	72	ASTM-P-0062-SET	287
APP-9-005	67, 114, 196	APP-9-070	68, 196	APP-9-141	76, 121, 197	APP-9-SET	196, 197	AS-E0286	69	ASTM-P-0063-SET	287
APP-9-005-10X	67, 114	APP-9-071	68, 196	APP-9-142	76, 121, 197	AP-SET	97	AS-E0299	69	ASTM-P-0064-SET	287
APP-9-005-50X	67	APP-9-072	68, 196	APP-9-143	69, 197	AS-E0002	71	AS-E0300	69	ASTM-P-0065-SET	287
APP-9-006	114, 196	APP-9-073	68, 196	APP-9-143-10X	69	AS-E0003	67	AS-E0305	75	ASTM-P-0066-SET	287
APP-9-007	71, 114, 196	APP-9-074	68, 196, 246	APP-9-144	73, 121, 197	AS-E0004	67	AS-E0308	69	ASTM-P-0067-SET	287
APP-9-007-10X	71, 114	APP-9-075	73, 196	APP-9-144-50X	73	AS-E0005	75	AS-E0311	72	ASTM-P-0068-SET	287
APP-9-007-W	71	APP-9-075-50X	73	APP-9-145	73, 121, 197	AS-E0006	67	AS-E0318	78	ASTM-P-0069-SET	287
APP-9-007-W-10X	71	APP-9-076	73, 118, 196	APP-9-145-50X	73	AS-E0007	70	AS-E0322	75	ASTM-P-0070-1X	276, 287
APP-9-008	67, 114, 196	APP-9-076-M-50X	73	APP-9-146	121, 197	AS-E0009	68	AS-E0323	69	ASTM-P-0070-2X	276, 287
APP-9-008-10X	67, 114, 204	APP-9-077	68, 196	APP-9-147	76, 121, 197	AS-E0010	70	AS-E0324	76	ASTM-P-0070-4X	276, 287
APP-9-008-10X-PAK	204	APP-9-078	68, 118, 196	APP-9-147-20X	76	AS-E0011	69	AS-E0326	71	ASTM-P-0070-10X	276, 287
APP-9-009	196	APP-9-079	68, 118, 196	APP-9-148	76, 121, 197	AS-E0012	68	AS-E0327	70	ASTM-P-0070-20X	276, 287
APP-9-010	67, 114, 196	APP-9-080	196	APP-9-148-20X	76	AS-E0013	70	AS-E0334	76	ASTM-P-0070-BL	276, 287
APP-9-010-20X	67, 114	APP-9-081	118, 119, 78	APP-9-149	76, 121, 197	AS-E0014	70	AS-E0335	70	ASTM-P-0070-SET	287
APP-9-011	74, 114, 196	APP-9-081-10X	118, 78	APP-9-149-M-10X	76, 121	AS-E0015	67	AS-E0338	69	ASTM-P-0071-01	276, 287
APP-9-012	74, 114, 196	APP-9-082	196	APP-9-150	76, 85, 121, 197	AS-E0016	38	AS-E0342	76	ASTM-P-0071-02	276, 287
APP-9-012-10X	74, 114	APP-9-083	118, 196	APP-9-150-M-10X	76, 121	AS-E0022	73	AS-E0344	76	ASTM-P-0071-03	276, 287
APP-9-013	114, 196	APP-9-084	118, 196	APP-9-151	76, 121, 197	AS-E0023	68	AS-E0346	68	ASTM-P-0071-BL	276, 287
APP-9-013-10X	114	APP-9-085	75, 118, 196	APP-9-151-25X	76	AS-E0025	68	AS-E0349	72	ASTM-P-0080	297
APP-9-014	196	APP-9-085-20X	75	APP-9-152	76, 121, 197	AS-E0026	75	AS-E0358	75	ASTM-P-0080-PAK	297
APP-9-015	67, 196	APP-9-086	75, 118, 196	APP-9-153	121, 197	AS-E0028	68	AS-E0360	67	ASTM-P-0081	297
APP-9-016	115, 196	APP-9-086-20X	75, 118	APP-9-154	121, 197	AS-E0029	73	AS-E0363	67	ASTM-P-0081-PAK	297
APP-9-016-10X	115	APP-9-087	73, 118, 196	APP-9-155	121, 197	AS-E0030	68	AS-E0364	69	ASTM-P-0082	297
APP-9-017	196	APP-9-087-50X	73	APP-9-156	76, 121, 197	AS-E0033	44	AS-E0368	70	ASTM-P-0082-PAK	297
APP-9-017-10X	115	APP-9-088	118, 119, 78	APP-9-157	197	AS-E0034	44	AS-E0375	68	ASTM-P-0082-R1	297
APP-9-018	115, 196	APP-9-088-10X	118, 78	APP-9-158	197	AS-E0036	69	AS-E0389	69	ASTM-P-0082-R1-PAK	297
APP-9-019	115, 196	APP-9-089	69, 196	APP-9-159	197	AS-E0038	38	AS-E0392	76	ASTM-P-0091-01-10X	287
APP-9-019-10X	115	APP-9-089-10X	69	APP-9-160	197	AS-E0041	67	AS-E0406	67	ASTM-P-0091-02-10X	287
APP-9-020	196	APP-9-090	196	APP-9-161	197	AS-E0042	69	AS-E0411	72	ASTM-P-0091-03-10X	287
APP-9-021	71, 115, 196	APP-9-090-10X	73	APP-9-162	197	AS-E0043	69	AS-E0431	69	ASTM-P-0091-04-10X	287
APP-9-021-50X	71, 115	APP-9-091	73, 118, 196	APP-9-163	197	AS-E0044	69	AS-E0439	69	ASTM-P-0091-05-10X	287
APP-9-022	196	APP-9-091-50X	73	APP-9-164	197	AS-E0046	68	AS-E0456	69	ASTM-P-0091-06-10X	287
APP-9-023	196	APP-9-092	44, 196	APP-9-165	197	AS-E0047	69	AS-E0458	76	ASTM-P-0091-07-10X	287
APP-9-024	196	APP-9-093	44, 196	APP-9-166	197	AS-E0050	69	AS-E0463	68	ASTM-P-0091-08-10X	287
APP-9-025	196	APP-9-094	196	APP-9-166-5X	197	AS-E0052	72	AS-E0470	20	ASTM-P-0091-09-10X	287
APP-9-026	116, 67, 196	APP-9-095	78, 118, 196	APP-9-167	, 21	AS-E0054	69	AS-E0473	67	ASTM-P-0091-10-10X	287
APP-9-026-M-10X	116, 67	APP-9-096	77, 118, 196	APP-9-168	21, 197	AS-E0058	73	AS-E0475	71	ASTM-P-0091-11-10X	287
APP-9-027	38, 116, 196	APP-9-096-10X	77, 118	APP-9-169	21, 197	AS-E0059	76	AS-E0476	67	ASTM-P-0091-12-10X	287
APP-9-027-40X	77, 116	APP-9-097	75, 85, 118, 196	APP-9-170	23, 197	AS-E0060	76, 234	AS-E0479	71	ASTM-P-0091-13-10X	287
APP-9-028	116, 196	APP-9-098	196	APP-9-171	23, 197	AS-E0061	76	AS-E0480	77	ASTM-P-0091-14-10X	287
APP-9-029	119, 196	APP-9-099	196	APP-9-172	23, 197	AS-E0062	74	AS-E0503	76	ASTM-P-0091-15-10X	287
APP-9-029-10X	119, 78	APP-9-100	196	APP-9-173	69, 122, 197	AS-E0063	74	AS-E0524	69	ASTM-P-0091-16-10X	287
APP-9-030	196, 201	APP-9-101	196	APP-9-174	69, 122, 197	AS-E0065	78	AS-E0527	69	ASTM-P-0091-17-10X	287
APP-9-031	196	APP-9-102	196	APP-9-174-20X	69	AS-E0066	78	AS-E0536	70	ASTM-P-0091-18-10X	287
APP-9-032	67, 196	APP-9-103	196	APP-9-175	197	AS-E0067	78	AS-E0542	74	ASTM-P-0091-19-10X	287
APP-9-033	115, 196	APP-9-104	69, 196	APP-9-176	74, 197	AS-E0068	78	AS-E0543	71	ASTM-P-0091-20-10X	287
APP-9-034	115, 196	APP-9-105	69, 119, 196	APP-9-176-10X	74	AS-E0069	78	AS-E0577	69	ASTM-P-0091-21-10X	287
APP-9-035	67, 115, 196	APP-9-106	69, 119, 196	APP-9-176-D-20X	74	AS-E0083	70	AS-E0578	74	ASTM-P-0092-0.1X-100ML	277
APP-9-035-20X	67, 115	APP-9-107	196	APP-9-177	122, 197	AS-E0084	70	AS-E0623	68	ASTM-P-0092-1X-100ML	277
APP-9-036	67, 196, 246	APP-9-108	119, 196	APP-9-177-10X	122	AS-E0085	70	AS-E0657	76	ASTM-P-0092-5X-100ML	277
APP-9-037	196	APP-9-109	119, 196	APP-9-178	122, 197	AS-E0136	67	AS-E0659	71	ASTM-P-0092-10X-100ML	277
APP-9-038	75, 116, 196	APP-9-110	196	APP-9-179	74, 122, 197	AS-E0149	69	AS-E0662	73	ASTM-P-0092-100ML-SET	277
APP-9-039	67, 196	APP-9-111	196	APP-9-180	76, 122, 197	AS-E0150	68	AS-E0669	69	ASTM-P-0092-100X-100ML	277
APP-9-040	196	APP-9-112	69, 196	APP-9-180-20X	76	AS-E0151	68	AS-E0673	69	ASTM-P-0092-500X-100ML	277
APP-9-041	73, 116, 196	APP-9-112-D-20X	69	APP-9-181	197	AS-E0169	67	AS-E0686	69	ASTM-P-0092-BL-100ML	277
APP-9-042	67, 196	APP-9-113	69, 196	APP-9-182	122, 197	AS-E0170	68	AS-E0687	69	ASTM-P-0100-01	379
APP-9-043	196	APP-9-114	69, 120, 196	APP-9-183	197	AS-E0171	68	AS-E0776	68	ASTM-P-0100-02	379
APP-9-044	67, 196	APP-9-114-10X	69	APP-9-184	69, 122, 197	AS-E0173	68	AS-E0928	71	ASTM-P-0100-03	379
APP-9-045	116, 196	APP-9-115	69, 120, 196	APP-9-185	122, 197	AS-E0175	70	AS-E0932	75	ASTM-P-0100-04	379
APP-9-046	73, 116, 196	APP-9-116	69, 120, 196	APP-9-186-M	44, 76, 122, 197	AS-E0176	70	AS-E0974	76	ASTM-P-0100-05	379
APP-9-046-50X	73	APP-9-116-D-20X	69, 120	APP-9-186-M-20X	44, 76	AS-E0177	70	AS-E0993	68	ASTM-P-0100-06	379
APP-9-046-D-20X	73, 116	APP-9-117	69, 120, 196	APP-9-187	123, 197	AS-E0179	74	AS-E1097	68	ASTM-P-0100-07	379
APP-9-047	38, 116, 196	APP-9-118	72, 120, 196	APP-9-188	197	AS-E0181	74	AS-E1103	70	ASTM-P-0100-08	379
APP-9-048-R1	68, 116, 196, 201	APP-9-118-20X	72	APP-9-189	70, 197	AS-E0182	73	AS-E1104	67	ASTM-P-0100-09	379
APP-9-048-R1-2X	68, 201, 204, 220	APP-9-119	120, 196	APP-9-190	197	AS-E0183	73	AS-E1105	67	ASTM-P-0100-10	379
APP-9-048-R1-10X	68, 116, 222	APP-9-120	71, 120, 196	APP-9-191	70, 123, 197	AS-E0189	74	AS-E1106	67	ASTM-P-0100-11	379
APP-9-048-R1-20X	68, 201, 222	APP-9-120-20X	71	APP-9-191-10X	70	AS-E0190	73	AS-E1107	70	ASTM-P-0100-12	379
APP-9-049	116, 196	APP-9-121	196	APP-9-192	70, 197	AS-E0191	74	AS-E1108	69	ASTM-P-0100-SET	379
APP-9-050	73, 116, 196	APP-9-121-10X	120	APP-9-193	70, 197	AS-E0193	73	AS-E1109	68	ASTM-P-0101-01	379
APP-9-050-10X	73, 116	APP-9-122	72, 120, 196	APP-9-194	70, 197, 246	AS-E0196	68	AS-E1112	70</		

Catalog Number Index

ASTM-P-0101-12	379	ASTM-P-128-02	266	B-600S	37	BDE-072S	26	BDE-168S	28	BF-D-93-65C	301, 306
ASTM-P-0101-SET	379	ASTM-P-128-03	266	B-600S-0.35X	37	BDE-073S	26	BDE-169S	28	BF-D-93-140C	301, 306
ASTM-P-0102-01	379	ASTM-P-128-04	266	BADGE-001N	92	BDE-074S	26	BDE-170S	28	BF-D-2500-B5	301, 306
ASTM-P-0102-02	379	ASTM-P-128-05	266	BADGE-001S	92	BDE-075S	26	BDE-171S	28	BF-D-2500-B20	301, 306
ASTM-P-0102-03	379	ASTM-P-128-06	266	BAN-01	35, 205	BDE-076S	27	BDE-172S	28	BF-D-2500-B100	301, 306
ASTM-P-0102-04	379	ASTM-P-129-01	266	BAN-02	35, 205	BDE-077S	27	BDE-173S	28	BF-D-4951-B100	301, 306
ASTM-P-0102-05	379	ASTM-P-129-02	266	BAN-03	35, 115, 205	BDE-078S	27	BDE-174S	28	BF-D-6584-01	300, 304
ASTM-P-0102-06	379	ASTM-P-131-01	267	BAN-04	35, 205	BDE-079S	27	BDE-175S	28	BF-D-6584-02	300, 304
ASTM-P-0102-07	379	ASTM-P-131-02	267	BAN-05	35, 205	BDE-080S	27	BDE-176S	28	BF-D-6584-03	300, 304
ASTM-P-0102-08	379	ASTM-P-131-03	267	BAN-06	35, 205	BDE-081S	27	BDE-177S	28	BF-D-6584-04	300, 304
ASTM-P-0102-09	379	ASTM-P-131-04	267	BAN-07	35, 205	BDE-082S	27	BDE-178S	28	BF-D-6584-05-IS	300, 304
ASTM-P-0102-10	379	ASTM-P-131-05	267	BAN-08	35, 205	BDE-083S	27	BDE-179S	28	BF-D-6584-06	300, 304
ASTM-P-0102-11	379	ASTM-P-132-01	266	BAN-09	35, 205	BDE-084S	27	BDE-180S	28	BF-D-6584-07N	300, 304
ASTM-P-0102-12	379	ASTM-P-132-02	266	BAN-10	35, 205	BDE-085S	27	BDE-181S	28	BF-D-6584-MIX	300, 304
ASTM-P-0102-SET	379	ASTM-P-132-03	266	BDD-301S	21	BDE-086S	27	BDE-182S	28	BF-D-6584-SET	300, 304
ASTM-P-0103-01	379	ASTM-P-132-04	266	BDD-301S-2.5X	21	BDE-087S	27	BDE-183S	28, 89	BF-FU-029-40X	300, 304
ASTM-P-0103-02	379	ASTM-P-133-01	266	BDD-302S	21	BDE-088S	27	BDE-184S	28	BF-FU-029-D	300, 304
ASTM-P-0103-03	379	ASTM-P-133-02	266	BDD-302S-2.5X	21	BDE-089S	27	BDE-185S	28	BF-FU-030-D	300, 304
ASTM-P-0103-04	379	ASTM-P-133-03	266	BDD-401S	21	BDE-090S	27	BDE-186S	28	BF-FU-030-D-40X	300, 304
ASTM-P-0103-05	379	ASTM-P-133-04	266	BDD-401S-2.5X	21	BDE-091S	27	BDE-187S	28	BF-FU-032-D	300, 304
ASTM-P-0103-06	379	ASTM-P-134-PAK	266	BDD-402S	21	BDE-092S	27	BDE-188S	28	BF-FU-032-D-40X	300, 304
ASTM-P-0103-07	379	ASTM-P-0135	300, 301	BDD-402S-2.5X	21	BDE-093S	27	BDE-189S	28	BF-KF-0.6X-5ML-VAP	301, 306
ASTM-P-0103-08	379	ASTM-P-0135-PAK	300, 301	BDD-403S	21	BDE-094S	27	BDE-190S	28	BF-KF-1X-5ML-VAP	301, 306
ASTM-P-0103-09	379	ASTM-P-0136-SET	300	BDD-403S-2.5X	21	BDE-095S	27	BDE-191S	28	BF-KF-10X-5ML-VAP	301, 306
ASTM-P-0103-10	379	ASTM-P-0137N-2G	273	BDE-001S	26	BDE-096S	27	BDE-192S	28	BF-KF-50X-5ML-VAP	301, 306
ASTM-P-0103-11	379	ASTM-P-0138N-2G	273, 298	BDE-002S	26	BDE-097S	27	BDE-193S	28	BF-MEOH-SET	304
ASTM-P-0103-12	379	ASTM-P-0140-IS	295	BDE-003S	26	BDE-098S	27	BDE-194S	28	BF-PALM-EE	305
ASTM-P-0103-SET	379	ASTM-P-0140-IS2	295	BDE-004S	26	BDE-099S	27, 89	BDE-195S	28	BF-PALM-ME	304
ASTM-P-0104-01	379	ASTM-P-0140-IS2-PAK	295	BDE-005S	26	BDE-100S	27, 89	BDE-196S	28	BF-RAP-EE	305
ASTM-P-0104-02	379	ASTM-P-0140-IS-PAK	295	BDE-006S	26	BDE-101S	27	BDE-197S	28	BF-RAP-ME	304
ASTM-P-0104-03	379	ASTM-P-0140-PES	295	BDE-007S	26	BDE-102S	27	BDE-198S	28	BF-SOY-EE	305
ASTM-P-0104-04	379	ASTM-P-0140-PES-PAK	295	BDE-008S	26	BDE-103S	27	BDE-199S-0.5X	28	BF-SOY-ME	304
ASTM-P-0104-05	379	ASTM-P-0140-QC	295	BDE-009S	26	BDE-104S	27	BDE-200S-0.5X	28	BF-UOP-391-B100	301, 306
ASTM-P-0104-06	379	ASTM-P-0140-QC-PAK	295	BDE-010S	26	BDE-105S	27	BDE-201S	28	BF-WM-B100-01-0.5X	306
ASTM-P-0104-07	379	ASTM-PIANO-R1-SET	271	BDE-011S	26	BDE-106S	27	BDE-202S	28	BF-WM-B100-09-0.5X	306
ASTM-P-0104-08	379	ASTM-SSTDAB/SET	270	BDE-012S	26	BDE-107S	27	BDE-203S	28	BF-WM-B100-13-0.5X	306
ASTM-P-0104-09	379			BDE-013S	26	BDE-108S	27	BDE-204S	28	BF-WM-B100-15-0.5X	306
ASTM-P-0104-SET	379			BDE-014S	26	BDE-109S	27	BDE-205S	28	BF-WM-B100-27-0.5X	306
ASTM-P-0105-01	379			BDE-015S	26	BDE-110S	27	BDE-206S	28	BF-WM-B100-29-0.5X	306
ASTM-P-0105-02	379			BDE-016S	26	BDE-111S	27	BDE-207S-R1	28	BF-WM-B100-32-0.5X	306
ASTM-P-0105-03	379	B-001N	34	BDE-017S	26	BDE-112S	27	BDE-208S	28	BF-WM-B100-41-0.5X	306
ASTM-P-0105-04	379	B-001S	34	BDE-018S	26	BDE-113S	27	BDE-209S	28, 89	BF-WM-B100-43-0.5X	306
ASTM-P-0105-05	379	B-002N	34	BDE-019S	26	BDE-114S	27	BDE-705	29, 37	BF-WM-B100-54-0.5X	306
ASTM-P-0105-06	379	B-002S	34	BDE-020S	26	BDE-115S	27	BDE-710	29, 37	BF-WM-B100-70-0.5X	306
ASTM-P-0105-07	379	B-003N	34	BDE-021S	26	BDE-116S	27	BDE-710-GL	29	BF-WM-B100-BL-1	306
ASTM-P-0105-SET	379	B-003S	34	BDE-022S	26	BDE-117S	27	BDE-736	29, 37	BF-WM-B100-BL-5	306
ASTM-P-0106-01	379	B-004N	34	BDE-023S	26	BDE-118S	27	BDE-798	29, 37	BF-WM-B100-MIX	306
ASTM-P-0106-02	379	B-004S	34	BDE-024S	26	BDE-119S	27	BDE-798-GL	29	BIOC-002N-25MG	258
ASTM-P-0106-03	379	B-007N-10MG	34	BDE-025S	26	BDE-120S	27	BDE-AAP-A	30, 184	BIOC-003N-25MG	258
ASTM-P-0106-04	379	B-007S	34	BDE-026S	26	BDE-121S	27	BDE-AAP-A-15X	30, 184	BIOC-004N-25MG	258
ASTM-P-0106-05	379	B-009N	34	BDE-027S	26	BDE-122S	27	BDE-BROMKAL	29	BIOC-005N-25MG	259
ASTM-P-0106-06	379	B-009S	34	BDE-028S	26	BDE-123S	27	BDE-CAE-1	29	BIOC-006N-25MG	257
ASTM-P-0106-07	379	B-010N-5MG	34	BDE-029S	26	BDE-124S	27	BDE-CALEWS	29, 255	BIOC-007N-25MG	259
ASTM-P-0106-SET	379	B-010S	34	BDE-030S	26	BDE-125S	27	BDE-CM	30, 184	BIOC-008N-25MG	260
ASTM-P-0107-5	379	B-015N	34	BDE-031S	26	BDE-126S	27	BDE-COC	30, 184	BIOC-009N-25MG	260
ASTM-P-0108-SET	380	B-015S	34	BDE-032S	26	BDE-127S	27	BDE-CR	29	BIOC-010N-25MG	258
ASTM-P-0109-SET	380	B-018N	34	BDE-033S	26	BDE-128S	27	BDE-CSM	30, 184	BIOC-011N	259
ASTM-P-0110-SET	380	B-018S	34	BDE-034S	26	BDE-129S	27	BDE-EPA-SET	30	BIOC-012N-25MG	258
ASTM-P-0111-SET	380	B-026N	34	BDE-035S	26	BDE-130S	27	BDE-LMS	29	BIOC-013N-25MG	259
ASTM-P-0112-SET	380	B-026S	34	BDE-036S	26	BDE-131S	27	BDE-MS	30, 184	BIOC-014N-25MG	260
ASTM-P-0113-SET	380	B-029S	34	BDE-037S	26	BDE-133S	27	BDE-USE	29	BIOC-015N	260
ASTM-P-0114-SET	381	B-030N	34	BDE-038S	26	BDE-134S	27	BF-5453-B5-5X-SET	301, 305	BIOC-016S-W	259
ASTM-P-0115-SET	381	B-030S	34	BDE-039S	26	BDE-135S	27	BF-5453-B5-10X-SET	301, 305	BIOC-017N	257
ASTM-P-0116-SET	381	B-031N	34	BDE-040S	26	BDE-136S	27	BF-5453-B5-15X-SET	301, 305	BIOC-018N-25MG	257
ASTM-P-0117-SET	381	B-031S	34	BDE-041S	26	BDE-137S	27	BF-5453-B5-30X	301, 305	BIOC-019N-25MG	259
ASTM-P-0118-SET	381	B-049N-5MG	34	BDE-042S	26	BDE-138S	27	BF-5453-B5-50X	301, 305	BIOC-020N	258
ASTM-P-0119-SET	382	B-049S	34	BDE-043S	26	BDE-139S	27	BF-5453-B5-75X	301, 305	BIOC-021N	258
ASTM-P-0120-SET	382	B-052N	34	BDE-044S	26	BDE-140S	27	BF-5453-B5-100X	301, 305	BIOC-022N	257
ASTM-P-0121-SET	382	B-052S	34	BDE-045S	26	BDE-141S	27	BF-5453-B5-200X	301, 305	BIOC-023N	260
ASTM-P-0122-0.5	377, 382	B-053N-5MG	34	BDE-046S	26	BDE-142S	27	BF-5453-B5-500X	301, 305	BIOC-024N	259
ASTM-P-0122-1	377, 382	B-053S	34	BDE-047S	26, 89	BDE-143S	27	BF-5453-B5-BL	301, 305	BIOC-025N	260
ASTM-P-0123-0.5	377, 382	B-077S	34, 16	BDE-048S	26	BDE-144S	27	BF-5453-B20-5X-SET	301, 305	BIOC-028N	260
ASTM-P-0123-1	377, 382	B-080S	34	BDE-049S	26	BDE-145S	27	BF-5453-B20-10X-SET	301, 305	BIOC-029N	260
ASTM-P-0124-0.5	377, 382	B100	306	BDE-050S	26	BDE-146S	27	BF-5453-B20-15X-SET	301, 305	BIOC-030N-10MG	258
ASTM-P-124-01	282, 377, 382	B-101N	34	BDE-051S	26	BDE-147S	27	BF-5453-B20-30X	301, 305	BIOC-032N	258
ASTM-P-124-01-VAP	279	B-101S	34	BDE-052S	26	BDE-148S	27	BF-5453-B20-50X	301, 305	BIOC-033N	259
ASTM-P-124-02	282	B-103N	34	BDE-053S	26	BDE-149S	27	BF-5453-B20-75X	301, 305	BIOC-034N-1G	260
ASTM-P-124-02-VAP	279	B-103S	34	BDE-054S	26	BDE-150S	27	BF-5453-B20-100X	301, 305	BIOC-036N-1G	260
ASTM-P-124-03	282	B-114S	34	BDE-055S	26	BDE-151S	28	BF-5453-B20-200X	301, 305	BIOC-038N-1G	260
ASTM-P-124-03-VAP	279	B-137S	34	BDE-056S	26	BDE-152S	28	BF-5453-B20-500X	301, 305	BIOC-039N-1G	258
ASTM-P-124-04	282	B-141S	34	BDE-057S	26	BDE-153S	28, 89	BF-5453-B20-BL	301, 305	BIOC-040N	260
ASTM-P-124-04-VAP	279	B-153N-5MG	34	BDE-058S	26	BDE-154S	28, 89	BF-5453-B100-5X-SET	301, 305	BIOC-041N	258
ASTM-P-124-05	282	B-153S	34	BDE-059S	26	BDE-155S	28	BF-5453-B100-10X-SET	301, 305	BIOC-042N	260
ASTM-P-124-05-VAP	279	B-155N	34	BDE-060S	26	BDE-156S	28	BF-5453-B100-15X-SET	301, 305	BIOC-043N-1G	259
ASTM-P-124-06	282	B-155S	34	BDE-061S	26	BDE-157S	28	BF-5453-B100-30X	301, 305	BIOC-044N-1G	257
ASTM-P-124-06-VAP	279	B-156S	34	BDE-062S	26	BDE-158S	28	BF-5453-B100-50X	301, 305	BIOC-045N	260
ASTM-P-0125-0.5	377, 382	B-159S	34	BDE-063S	26	BDE-159S	28	BF-5453-B100-75X	301, 305	BIOC-046N	258
ASTM-P-0125-1	377, 382	B-169S	34	BDE-064S	26	BDE-160S	28	BF-5453-B100-100X	301, 305	BIOC-047N-1G	258
ASTM-P-125-01-VAP	279	B-180S	34	BDE-065S	26	BDE-161S	28	BF-5453-B100-200X	301, 305	BIOC-049N	260
ASTM-P-125-02-VAP	279	B-194S	34	BDE-066S	26	BDE-162S	28	BF-5453-B100-500X	301, 305	BIOC-050S-CN	259
ASTM-P-126-01	266	B-200S	34	BDE-067S	26	BDE-163S	28	BF-5453-B100-BL	301, 305	BIOC-051N-10MG	260
ASTM-P-126-VAP	266	B-209N	34	BDE-068S	26	BDE-164S	28	BF-14538-B100	301, 306	BIOC-052N	257
ASTM-P-127-01	266	B-209S	34	BDE-069S	26	BDE-165S	28	BF-BT-EE</			

Catalog Number Index

BIOC-056S-TP	259	BIOC-156N-10MG	258	BPA-AF-S	92	C-021N	3	C-052S-TP	212, 4	C-084S-TP	4
BIOC-057N	258	BIOC-157N-10MG	259	BPA-A-N	92	C-021S	3	C-053N	4	C-085N	4
BIOC-058N	259	BIOC-158N-10MG	259	BPA-AP-N	92	C-021S-TP	3	C-053S	4	C-085S	4
BIOC-059N-50MG	259	BIOC-159N-10MG	260	BPA-AP-S	92	C-022N	3	C-053S-TP	4	C-085S-TP	4
BIOC-060N	260	BIOC-161N-10MG	257	BPA-A-S	92	C-022S	3	C-054N	4	C-086N	4
BIOC-061N-10MG	258	BIOC-162S	258	BPA-B-N-10MG	92	C-022S-TP	3	C-054S	4	C-086S	4
BIOC-062N	258	BIOC-163N	258	BPA-BP-N	92	C-023N	3	C-054S-TP	4	C-086S-TP	4
BIOC-064N	258	BIOC-164N-25MG	260	BPA-BP-S	92	C-023S	3	C-055N	4	C-087N	4
BIOC-065N	259	BIOC-165N-10MG	258	BPA-B-S	92	C-023S-TP	3	C-055S	4	C-087S	212, 4
BIOC-066N-1G	258	BIOC-166N	260	BPA-C2-N	92	C-024N	3	C-055S-TP	4	C-087S-TP	212, 4
BIOC-067N	257	BIOC-167N	259	BPA-C2-S	92	C-024S	3	C-056N	4	C-088N	4
BIOC-068N	260	BIOC-168N	257	BPA-C-N	92	C-024S-TP	3	C-056S	4	C-088S	4
BIOC-069N-50MG	259	BIOC-169N	258	BPA-C-S	92	C-025N	3	C-056S-TP	4	C-088S-TP	4
BIOC-070N	260	BIOC-170N	259	BPA-E-N	92	C-025S	3	C-057N	4	C-089N	4
BIOC-071N	260	BIOC-171N	260	BPA-E-S	92	C-025S-TP	3	C-057S	4	C-089S	4
BIOC-072N-10MG	260	BIOC-172N-10MG	260	BPA-F-N-10MG	92	C-026N	3	C-057S-TP	4	C-089S-TP	4
BIOC-073N-10MG	259	BIOC-174N	260	BPA-F-S	92	C-026S	3	C-058N	4	C-090N	4
BIOC-074N	257	BIOC-175N-10MG	258	BPA-G-N	92	C-026S-TP	3	C-058S	4	C-090S	4
BIOC-075N-10MG	259	BIOC-176N-10MG	258	BPA-G-S	92	C-027N	3	C-058S-TP	4	C-090S-TP	4
BIOC-076N-10MG	260	BIOC-177N-10MG	258	BPA-M-N	92	C-027S	3	C-059N	4	C-091N	4
BIOC-077N-10MG	259	BIOC-178N-10MG	258	BPA-M-S	92	C-027S-TP	3	C-059S	4	C-091S	4
BIOC-078N	258	BIOC-179S-D	258	BPA-PH-N	92	C-028N	3	C-059S-TP	4	C-091S-TP	4
BIOC-079N	258	BIOC-180N-10MG	257	BPA-PH-S	92	C-028S	3	C-060N	4	C-092N	4
BIOC-080N-10MG	259	BIOC-181S	259	BPA-P-N	92	C-028S-TP	3	C-060S	4	C-092S	4
BIOC-081N	258	BIOC-183N-10MG	260	BPA-P-S	92	C-029N	3	C-060S-TP	4	C-092S-TP	4
BIOC-082S-W	257	BIOC-184N-10MG	259	BPA-S-N	92	C-029S	3	C-061N	4	C-093N	4
BIOC-083N-10MG	259	BIOC-185N-10MG	258	BPA-S-S	92	C-029S-TP	3	C-061S	4	C-093S	4
BIOC-084N	260	BIOC-186N	259	BPA-TMC-N-10MG	92	C-030N	3	C-061S-TP	4	C-093S-TP	4
BIOC-085N-10MG	260	BIOC-187N	259	BPA-TMC-S	92	C-030S	3	C-062N	4	C-094N	4
BIOC-086N	259	BIOC-188N	259	BPA-Z-N	92	C-030S-TP	245, 10, 3	C-062S	4	C-094S	4
BIOC-087N-10MG	260	BIOC-189S-CN	260	BPA-Z-S	92	C-031N	3	C-062S-TP	4	C-094S-TP	4
BIOC-088S	260	BIOC-190N-10MG	260			C-031S	212, 3	C-063N	4	C-095N	4
BIOC-089S	258	BIOC-191S	259			C-031S-TP	212, 3	C-063S	4	C-095S	4
BIOC-091N	260	BIOC-194N-10MG	260			C-032N	3	C-063S-TP	4	C-095S-TP	4
BIOC-092N	260	BIOC-195N	259			C-032S	3	C-064N	4	C-096N	4
BIOC-093N	260	BIOC-196N-10MG	258			C-032S-TP	3	C-064S	4	C-096S	4
BIOC-095N-10MG	257	BIOC-199N	259	C-001N	3	C-033N	3	C-064S-TP	4	C-096S-TP	4
BIOC-096N	260	BIOC-200N-10MG	259	C-001S	212, 3	C-033S	3	C-065N	4	C-097N	4
BIOC-097S-CN	258	BIOC-201N-10MG	258	C-002N	3	C-033S-TP	3	C-065S	4	C-097S	4
BIOC-098N	258	BIOC-202N	258	C-002S	3	C-034N	3	C-065S-TP	4	C-097S-TP	4
BIOC-099N-10MG	259	BIOC-203N	258	C-002S-TP	3	C-034S	3	C-066N	4	C-098N	4
BIOC-100N-10MG	259	BIOC-205N	259	C-003N	3	C-034S-TP	3	C-066S	212, 4	C-098S	4
BIOC-101N	260	BIOC-207N-10MG	260	C-003S	3	C-035N	3	C-066S-TP	212, 4	C-098S-TP	4
BIOC-102S	259	BIOC-209N-10MG	260	C-003S-TP	3	C-035S	3	C-067N	4	C-099N	4
BIOC-103N	258	BIOC-210N-10MG	260	C-004N	3	C-35-SET	3	C-067S	4	C-099S	4
BIOC-104N	259	BIOC-211N-10MG	257	C-004S	3	C-035S-TP	3	C-067S-TP	4	C-099S-TP	4
BIOC-105N	260	BIOC-212S	260	C-004S-TP	3	C-036N	3	C-068N	4	C-100N	4
BIOC-106N-10MG	259	BIOC-213N	260	C-005N	3	C-036S	3	C-068S	4	C-100S	4
BIOC-108N-10MG	259	BIOC-214N-10MG	258	C-005S	212, 3	C-036S-TP	3	C-068S-TP	4	C-100-SET	3
BIOC-109N	258	BIOC-215N-10MG	257	C-005S-TP	212, 3	C-037N	3	C-069N	4	C-100S-TP	4
BIOC-110N	258	BIOC-216N-10MG	258	C-006N	3	C-037S	3	C-069S	4	C-101N	4
BIOC-111N	260	BIOC-217S	259	C-006S	3	C-037S-TP	3	C-069S-TP	4	C-101S	4, 212
BIOC-112N-10MG	258	BIOC-218N-10MG	258	C-006S-TP	3	C-038N	3	C-070N	4	C-101S-TP	4, 212
BIOC-113N-10MG	260	BIOC-219N-10MG	258	C-007N	3	C-038S	3	C-070S	4	C-102N	4
BIOC-114N	258	BIOC-220N-10MG	260	C-007S	3	C-038S-TP	3	C-070S-TP	4	C-102S	4
BIOC-115N	259	BIOC-221N-10MG	258	C-007S-TP	3	C-039N	3	C-071N	4	C-102S-TP	4
BIOC-116N	258	BIOC-222N-10MG	258	C-008N	3	C-039S	3	C-071S	4	C-103N	4
BIOC-117N-1G	259	BIOC-223N	259	C-008S	3	C-039S-TP	3	C-071S-TP	4	C-103S	4
BIOC-118N	260	BIOC-224N-10MG	259	C-008S-TP	3	C-040N	4	C-072N	4	C-103S-TP	4
BIOC-119N-10MG	259	BIOC-225N-10MG	260	C-009N	3	C-040S	4	C-072S	4	C-104N	4
BIOC-120N	260	BIOC-226S	259	C-009S	3	C-040S-TP	4	C-072S-TP	4	C-104S	4
BIOC-121N	260	BIOC-227N-10MG	258	C-009S-TP	3	C-041N	4	C-073N	4	C-104S-TP	4
BIOC-122N-10MG	258	BIOC-228S-CN	259	C-010N	3	C-041S	4	C-073S	4	C-105N	4
BIOC-123N-10MG	259	BIOC-229N-10MG	259	C-010S	3	C-041S-TP	4	C-073S-TP	4	C-105S	4
BIOC-124N-10MG	258	BIOC-230N-10MG	259	C-010S-TP	3	C-042N	4	C-074N	4	C-105S-TP	4
BIOC-125N-10MG	258	BIOC-231S-CN	259	C-011N	3	C-042S	4	C-074S	4	C-106N	4
BIOC-126N-10MG	258	BIOC-232N-10MG	260	C-011S	3	C-042S-TP	4	C-074S-TP	4	C-106S	4
BIOC-127N-10MG	259	BIOC-233N	260	C-011S-TP	3	C-043N	4	C-075N	4	C-106S-TP	4
BIOC-128N-10MG	257	BIOC-234S	259	C-012N	3	C-043S	4	C-075S	4	C-107N	5
BIOC-129S	259	BIOC-235N-10MG	258	C-012S	3	C-043S-TP	4	C-075S-TP	4	C-107S	5
BIOC-130N	259	BIOC-236N-10MG	257	C-012S-TP	3	C-044N	4	C-076N	4	C-107S-TP	5
BIOC-131N-10MG	260	BIOC-237N-10MG	257	C-013N	3	C-044S	212, 4	C-076S	4	C-108N	5
BIOC-132N	258	BIOC-238N-10MG	260	C-013S	3	C-044S-TP	212, 4	C-076S-TP	4	C-108S	5
BIOC-133N-10MG	258	BIOC-239N-10MG	257	C-013S-TP	3	C-045N	4	C-077N	4	C-108S-TP	5
BIOC-134N-10MG	258	BOOK-PCB-001	2	C-014N	3	C-045S	4	C-077S	4	C-109N	5
BIOC-135N-10MG	259	BOOK-TPH-001		C-014S	3	C-046N	4	C-077S-TP	4	C-109S	5
BIOC-136N	258	BP-002S	35	C-014S-TP	3	C-046S	4	C-078N	4	C-109S-TP	5
BIOC-137N-10MG	258	BP-003S	35, 205	C-015N	3	C-046S-TP	4	C-078S	4	C-110N	5
BIOC-138N	259	BP-004S	35, 205	C-015S	3	C-047N	4	C-078S-TP	4	C-110S	212, 5
BIOC-139N-10MG	259	BP-023S	35, 205	C-015S-TP	3	C-047S	4	C-079N	4	C-110S-TP	212, 5
BIOC-140N	258	BP-024S	35, 205	C-016N	3	C-047S-TP	4	C-079S	4	C-111N	5
BIOC-141N	260	BP-025S	35, 205	C-016S	3	C-048N	4	C-079S-TP	4	C-111S	5
BIOC-142N-10MG	258	BP-026S	35, 205	C-016S-TP	3	C-048S	4	C-080N	4	C-111S-TP	5
BIOC-143N-10MG	258	BP-035S	35, 35	C-017N	3	C-048S-TP	4	C-080S	4	C-112N	5
BIOC-144N-10MG	260	BP-234S	35, 205	C-017S	3	C-049N	4	C-080S-TP	4	C-112S	5
BIOC-145N-10MG	260	BP-235S	35	C-017S-TP	3	C-049S	4	C-081N	4	C-112S-TP	5
BIOC-146N-10MG	258	BP-236S	35, 205	C-018N	3	C-049S-TP	4	C-081S	4	C-113N	5
BIOC-147N	260	BP-245S	35, 205	C-018S	212, 3	C-050N	4	C-081S-TP	4	C-113S	5
BIOC-148N-10MG	259	BP-246S	35, 37, 205	C-018S-TP	212, 3	C-050S	4	C-082N	4	C-113S-TP	5
BIOC-149N-10MG	260	BP-345S	35, 205	C-019N	3	C-050S-TP	4	C-082S-TP	4	C-114N	5
BIOC-150N	258	BP-2345S	35, 205	C-019S	3	C-051N	4	C-083N	4	C-114S	5
BIOC-151N	258	BP-2346S	35, 205	C-019S-TP	3	C-051S	4	C-083S	4	C-114S-TP	5
BIOC-153N	258	BP-2356S	35, 205	C-020N	3	C-051S-TP	4	C-083S-TP	4	C-115N	5
BIOC-154N	258	BP-23456S	35, 205	C-020S	3	C-052N	4	C-084N	4	C-115S	5
BIOC-155N	258	BPA-AF-N	92	C-020S-TP	3	C-052S	212, 4	C-084S	4	C-115S-TP	5

Catalog Number Index

C-116N	5	C-147S-TP	5	C-179S	6	C-216/260-WL-5X-5ML	209, 212	C-248S-PAK	16	CCME-LPF-SET	243, 310
C-116S	5	C-148N	5	C-179S-TP	6	C-216/260-WL-5X-10ML	209, 212	C-248-ST-1	16, 275	CCME-MHPF-SET	243, 310
C-116S-TP	5	C-148S	5	C-180N	6	C-216/260-WL-10X-5ML	209, 212	C-248-ST-1-PAK	16, 275	CCME-QC	243, 310
C-117N	5	C-148S-TP	5	C-180S	212, 6	C-216/260-WL-10X-10ML	209, 212	C-248-ST-2	16, 275	CCME-QC-PAK	243, 310
C-117S	5	C-149N	5	C-180S-TP	212, 6	C-216N	16, 275	C-248-ST-2-PAK	16, 275	CCME-SPIKE	243, 310
C-117S-TP	5	C-149S	5	C-181N	6	C-216N-50MG	89	C-248S-TP	16	CCME-VPH	243, 310
C-118N	5	C-149S-TP	5	C-181S	6	C-216S	297, 16	C-248-WL-5X-5ML	209	CCME-VPH/SS	243, 310
C-118S	5	C-150N	5	C-181S-TP	6	C-216S-H	16	C-248-WL-5X-10ML	209	C-CS-01	13
C-118S-TP	5	C-150S	5	C-182N	6	C-216S-H-10X138, 139, 146, 207, 226, 16, 297, 89		C-248-WL-10X-5ML	209	C-CS-02	13
C-119N	5	C-150S-TP	5	C-182S	6	C-216S-H-10X-PAK138, 139, 146, 172, 207, 16, 226		C-248-WL-10X-10ML	209	C-CS-03	13
C-119S	5	C-151N	5	C-182S-TP	6	C-216S-M	244, 297, 16	C-254-CAL-SET	210	C-CS-04	13
C-119S-TP	5	C-151S	212, 5	C-183N	6	C-216S-M-2.85X	16	C-254N-50MG	16, 89, 275	C-CS-05	13
C-120N	5	C-151S-TP	212, 5	C-183S	212, 6	C-216S-M-PAK	16	C-254S	297, 16	C-CS-06	14
C-120S	5	C-152N	5	C-183S-TP	212, 6	C-216S-PAK	16	C-254S-H	16	C-CS-07	14
C-120S-TP	5	C-152S	5	C-184N	6	C-216S-ST-1	16, 275	C-254S-H-10X	16, 89, 138, 139, 146, 207, 226, , 297	C-CS-08	14
C-121N	5	C-152S-TP	5	C-184S	6	C-216-ST-1	16, 275	C-254S-M	244, 297, 16	C-CS-09	14
C-121S	5	C-153N	5	C-184S-TP	6	C-216-ST-1-PAK	16, 275	C-254S-M-2.85X	16	C-CSA-SET	14
C-121S-TP	5	C-153S	212, 5	C-185N	6	C-216-ST-2	16, 275	C-254S-M-PAK	16	C-CSN-SET	14
C-122N	5	C-153S-TP	212, 5	C-185S	6	C-216-ST-2-PAK	16, 275	C-254S-M-PAK	16	C-CSQ-SET	14
C-122S	5	C-154N	5	C-185S-TP	6	C-216S-TP	16	C-254S-M-PAK	16	CDE-003N	20
C-122S-TP	5	C-154S	5	C-186N	6	C-221-CAL-SET	209	C-254S-PAK	16	CDE-003S	20
C-123N	5	C-154S-TP	5	C-186S	6	C-221N-50MG	16, 89, 275	C-254S-SET	16	CDE-007N	20
C-123S	5	C-155N	5	C-186S-TP	6	C-221S	297, 16	C-254S-ST-1	16, 275	CDE-007S	20
C-123S-TP	5	C-155S	5	C-187N	6	C-221S-H	16	C-254-ST-1-PAK	16, 275	CDE-015N	20
C-124N	5	C-155S-TP	5	C-187S	212, 6	C-221S-H-10X138, 139, 146, 207, 226, 16, 297, 89		C-254-ST-2	16, 275	CDE-015S	20
C-124S	5	C-156N	5	C-187S-TP	212, 6	C-221S-H-10X-PAK138, 139, 146, 172, 207, 16, 226		C-254-ST-2-PAK	16, 275	CDE-077S	20
C-124S-TP	5	C-156S	5	C-188N	6	C-221S-H-10X-PAK138, 139, 146, 172, 207, 16, 226		C-254S-TP	16	CDE-105S	20
C-125N	5	C-156S-TP	5	C-188S	6	C-221S-M	244, 297, 16	C-254-WL-5X-5ML	210	CDE-118N	20
C-125S	5	C-157N	5	C-188S-TP	6	C-221S-M-2.85X	16	C-254-WL-5X-10ML	210	CDE-118S	20
C-125S-TP	5	C-157S	5	C-189N	6	C-221S-M-PAK	16	C-254-WL-10X-5ML	210	CDE-209N	20
C-126N	5	C-157S-TP	5	C-189S	6	C-221S-M-PAK	16	C-254-WL-10X-10ML	210	CDE-209S	20
C-126S	5	C-158N	5	C-189S-TP	6	C-221S-PAK	16	C-260N-50MG	16, 89, 275	C-DIOXLIK1-SET	12
C-126S-TP	5	C-158S	5	C-190N	6	C-221S-SET	16	C-260S	297, 16	C-DIOXLIK2-SET	12
C-127N	5	C-158S-TP	5	C-190S	6	C-221-ST-1	16, 275	C-260S-H	16	C-DIOXLIK3-04	12
C-127S	5	C-159N	5	C-190S-TP	6	C-221-ST-1-PAK	16, 275	C-260S-H-10X138, 139, 146, 207, 226, 16, 297, 89		C-DIOXLIK3-06	12
C-127S-TP	5	C-159S	5	C-191N	6	C-221-ST-2	16, 275	C-260S-H-10X-PAK	16, 138, 139, 146, 172, 207, 226	C-DIOXLIK3-08	12
C-128N	5	C-159S-TP	5	C-191S	6	C-221-ST-2-PAK	16, 275	C-260S-M-2.85X	16	C-DIOXLIK3-10	12
C-128S	5	C-160N	5	C-191S-TP	6	C-221S-TP	16	C-260S-M-PAK	16	C-DIOXLIK3-12	12
C-128S-TP	5	C-160S	5	C-192N	6	C-221-WL-5X-5ML	209	C-260S-PAK	16	C-DIOXLIK3-SET	12
C-129N	5	C-160S-TP	5	C-192S	6	C-221-WL-5X-10ML	209	C-260-ST-1	16, 275	C-EU-IS-10ML	245, 11
C-129S	5	C-161N	5	C-192S-TP	6	C-221-WL-10X-5ML	209	C-260-ST-1-PAK	16, 275	C-IADN-01	10
C-129S-TP	5	C-161S	5	C-193N	6	C-221-WL-10X-10ML	209	C-260-ST-2	16, 275	C-IADN-02	10
C-130N	5	C-161S-TP	5	C-193S	6	C-232-CAL-SET	209	C-260S-TP	16	C-IADN-03	10
C-130S	5	C-162N	5	C-193S-TP	6	C-232S	297, 16	C-260-TP	16	CLP-001B	127
C-130S-TP	5	C-162S	5	C-194N	6	C-232S-H	16	C-260S-TP	16	CLP-003-R	127, 224
C-131N	5	C-162S-TP	5	C-194S	6	C-232S-H-10X138, 139, 146, 207, 226, 16, 297, 89		C-260-ST-2	16, 275	CLP-003-R-10X	127, 128, 224
C-131S	5	C-163N	5	C-194S-TP	6	C-232S-M	244, 297, 16	C-260-ST-2-PAK	16, 275	CLP-003-R-10X-PAK	127, 128, 224
C-131S-TP	5	C-163S	5	C-195N	6	C-232S-M-2.85X	16	C-260S-TP	16		
C-132N	5	C-163S-TP	5	C-195S	6	C-232S-M-PAK	16	C-262N-50MG	16, 89, 275	CLP-003-R-PAK	127, 224
C-132S	5	C-164N	5	C-195S-TP	6	C-232S-PAK	16	C-262S	297, 16	CLP-004	67, 127, 129, 224
C-132S-TP	5	C-164S	5	C-196N	6	C-232-ST-1	16, 275	C-262S-H	16	CLP-004-10X	67, 127, 128, 129, 190, 224
C-133N	5	C-164S-TP	5	C-196S	6	C-232-ST-1-PAK	16, 275	C-262S-H-10X	16, 89, 138, 139, 146, 207, 226, 297	CLP-004-10X-PAK	127, 128, 129, 190, 224
C-133S	5	C-165N	5	C-196S-TP	6	C-232-ST-2	16, 275	C-262S-M	244, 297, 16	CLP-004-80X	67, 127
C-133S-TP	5	C-165S	5	C-197N	6	C-232-ST-2-PAK	16, 275	C-262S-M-2.85X	16	CLP-004-80X-PAK	127
C-134N	5	C-165S-TP	5	C-197S	6	C-232S-TP	16	C-262S-M-PAK	16	CLP-004-100X	67, 127, 128, 129, 224, 254
C-134S	5	C-166N	5	C-197S-TP	6	C-232-WL-5X-5ML	209	C-262S-PAK	16	CLP-004-100X-PAK127, 128, 129, 224, 254	
C-134S-TP	5	C-166S	5	C-198N	6	C-232-WL-5X-10ML	209	C-262-ST-1	16, 275	CLP-004-1000X	67, 127, 129
C-135N	5	C-166S-TP	5	C-198S	6	C-232-WL-10X-5ML	209	C-262-ST-1-PAK	16, 275	CLP-004-PAK	127, 129, 224
C-135S	5	C-167N	5	C-198S-TP	6	C-232-WL-10X-10ML	209	C-262-ST-2	16, 275	CLP-007-2	133, 136
C-135S-TP	5	C-167S	5	C-199N-R1	6	C-242-CAL-SET	209	C-262-ST-2-PAK	16, 275	CLP-007A	133, 226
C-136N	5	C-167S-TP	5	C-199S-R1	6	C-242N-50MG	16, 89, 275	C-262S-TP	16	CLP-007B	133, 226
C-136S	5	C-168N	5	C-199S-TP-R1	6	C-242S	297, 16	C-268S	297, 16	CLP-007-R	133
C-136S-TP	5	C-168S	5	C-200N-R1	6	C-242S-H	16	C-268S-H	16	CLP-007-R-SET	133
C-137N	5	C-168S-TP	5	C-200N-TP	6	C-242S-H-10X138, 139, 146, 207, 226, 16, 297, 89		C-268S-H-10X	16, 138, 139, 146, 172, 207, 226, 297	CLP-007R-WL-50ML	230, 133
C-137S	212, 5	C-169N	5	C-200S-R1	6	C-242S-H-10X-PAK138, 139, 146, 172, 207, 16, 226		C-268S-M	16, 244, 297	CLP-007-SET	133, 226
C-137S-TP	212, 5	C-169S	5	C-200S-TP-R1	6	C-242S-M	244, 297, 16	C-268S-M-2.85X	16	CLP-007-SET-PAK	226
C-138N	5	C-169S-TP	5	C-201N-R1	6	C-242S-M-2.85X	16	C-268S-M-PAK	16	CLP-007-WL-50ML	230, 133
C-138N	5	C-170N	6	C-201S-R1	6	C-242S-M-PAK	16	C-268S-PAK	16	CLP-008A	134
C-138S	212, 5	C-170S	212, 6	C-201S-TP-R1	6	C-242S-PAK	16	C-268-ST-1	16, 275	CLP-008B-R	134
C-138S-TP	212, 5	C-170S-TP	212, 6	C-202N	6	C-242-ST-1	16, 275	C-268-ST-1-PAK	16, 275	CLP-008-R-SET	134
C-139N	5	C-171N	6	C-202S	6	C-242-ST-2	16, 275	C-268-ST-2	16, 275	CLP-009	133
C-139S	5	C-171N	6	C-202S-TP	6	C-242-ST-2-PAK	16, 275	C-268-ST-2-PAK	16, 275	CLP-010	133, 226
C-139S-TP	5	C-171S	6	C-203N	6	C-242S-TP	16	C-268S-TP	16	CLP-010-10X	133, 226
C-140N	5	C-171S-TP	6	C-203S	6	C-242S-M	244, 297, 16	C-298S-H-10X	89	CLP-011A	133, 226
C-140S	5	C-172N	6	C-203S-TP	6	C-242-WL-5X-5ML	209	CAR-DNPH	255, 312	CLP-011B	133, 226
C-140S-TP	5	C-172S	6	C-204							

Catalog Number Index

CLP-019-10X-PAK	137	CLP-216/260-WL-10ML	139	CLP-LC-SS-2	74, 135	CRM061-30G	385	D-502S	21	D-4629-91-HB-CON	276
CLP-020	127, 224	CLP-221-WL	139	CLP-LC-SS-2-PAK	135	CRM090-100G	385	D-503N	21	D-4629-91-HB-CON-PAK	276
CLP-020-10X	127, 224	CLP-221-WL-5ML	139	CLP-LCS-SV-SET	135	CRM091-100G	385	D-503S	21	D-4629-91-LB-0.3X	276
CLP-020-10X-PAK	127, 224	CLP-221-WL-10ML	139	CLP-LCS-V	129	CRM092-100G	385	D-504N	21	D-4629-91-LB-1X	276
CLP-020-PAK	127, 224	CLP-232-WL	139	CLP-LCS-V-PAK	129	CRM202-225G	384	D-504S	21	D-4629-91-LB-10X	276
CLP-021	127, 224	CLP-232-WL-5ML	139	CLP-PAN-01-1	351	CRM204-225G	384	D-505N	21	D-4629-91-LB-25X	276
CLP-021-10X	127, 224	CLP-232-WL-10ML	139	CLP-PAN-01-5	351	CRM205-225G	384	D-505S	21	D-4629-91-LB-50X	276
CLP-021-10X-PAK	127, 224	CLP-242-WL	139	CLP-PAN-02-1	351	CRM206-225G	384	D-601N	21	D-4629-91-LB-75X	276
CLP-021-PAK	127, 224	CLP-242-WL-5ML	139	CLP-PAN-02-5	351	CRM207-225G	384	D-601S	21	D-4629-91-LB-100X	276
CLP-022	126	CLP-242-WL-10ML	139	CLP-PES-A	137, 186	CRM208-225G	384	D-602N	21	D-4629-91-LB-BL	276
CLP-022G	126	CLP-248-WL	139	CLP-PES-A-20X	137	CRM209-225G	384	D-602S	21	D-4629-91-LB-CON	276
CLP-022G-10X	126	CLP-248-WL-5ML	139	CLP-PES-A-PAK	137	CRM210-225G	384	D-603N	21	D-4629-91-LB-CON-PAK	276
CLP-022G-10X-PAK	126	CLP-248-WL-10ML	139	CLP-PI	127, 190	CRM211-225G	384	D-603S	21	D-4629-HB-CAL-R1-SET	276
CLP-022G-PAK	126	CLP-254-WL	139	CLP-PI-0.25X	127	CRM212-225G	384	D-604N	21	D-4629-LB-CAL-R1-SET	276
CLP-022K	126, 128	CLP-254-WL-5ML	139	CLP-PI-0.25X-PAK	127	CRM213-225G	384	D-604S	21	D-4815-10ML-SET	277
CLP-022K-10X	126, 128	CLP-254-WL-10ML	139	CLP-PI-2.5X	127, 128	CRM215-225G	384	D-605N	21	D-4815/IS-SET	277
CLP-022K-25X	126	CLP-AA-SET	334	CLP-PI-2.5X-PAK	127, 128	CRM218-225G	384	D-605S	21	D-4815/IS-SET-PAK	277
CLP-022-LC	129	CLP-AS	133, 232	CLP-PI-3-5X	67	CRM497-100G	385	D-611E-SET	266	D-4815-RT	277
CLP-022-PART-A	126	CLP-AS-1	73	CLP-PIN-01-1	351, 357	CRM498-100G	385	D-611-SET	266	D-4815-RT-PAK	277
CLP-022-PART-B	126	CLP-AS-3	74	CLP-PIN-01-5	351, 357	CRM499-100G	385	D-701N	21	D-4815-VT	277
CLP-022-R2	126	CLP-AS-10X	133	CLP-PIN-02-1	351, 357	CRM700-50G	385	D-701S	21	D-4815-VT-PAK	277
CLP-022-R3	128	CLP-AS-10X-PAK	133	CLP-PIN-02-5	351, 357	CRM701-50G	385	D-702N	21	D-4929-94	277
CLP-022-SET	126	CLP-AS-PAK	133, 232	CLP-PI-PAK	127, 190	CRM702-50G	385	D-702S	21	D-4929-94-100X	277
CLP-023R	137	CLP-BLH-5	330, 334, 348	CLP-PIPS	127, 128	CRM750-30G	385	D-801N	19, 21	D-4929-94-100X-PAK	277
CLP-023R-4X	137	CLP-BLH-L-VAP	330, 334, 348	CLP-PIPS-PAK	127, 128	CRM751-30G	385	D-801S	19, 21	D-4929-94-PAK	277
CLP-023R-10X	137	CLP-BLMA-5	330, 334, 348	CLP-PS	127	CRM752-30G	385	D-2622-LL-5X-100ML	269	D-5059-A-01-100ML	278
CLP-023R/024R-4X-SET	137	CLP-BLMA-L-VAP	330, 334, 348	CLP-PS-3	70	CRM775-30G	385	D-2622-LL-10X-100ML	269	D-5059-A-02-100ML	278
CLP-023R/024R-40X-SET	137	CLP-BLN-5	330, 334, 348	CLP-PS-3-10X	70	CRM776-30G	385	D-2622-LL-30X-100ML	269	D-5059-A-03-100ML	278
CLP-023R/024R-160X-SET	137	CLP-BLN-L-VAP	330, 334, 348	CLP-PS-4X	127	CRM777-30G	385	D-2622-LL-50X-100ML	269	D-5059-A-04-100ML	278
CLP-023R/024R-SET	137	CLP-BLW-5	330, 334, 348	CLP-PS-4X-PAK	127	CRM2003-50G	385	D-2622-LL-75X-100ML	269	D-5059-A-05-100ML	278
CLP-023R-30X	137	CLP-BLW-L-VAP	330, 334, 348	CLP-PS-10X	127, 128	C-SCA-01	11	D-2622-LL-100X-100ML	269	D-5059-A-06-100ML	278
CLP-023R-160X	137	CLP-BN-MS	136	CLP-PS-10X-PAK	127, 128	C-SCA-02	11	D-2622-LL-200X-100ML	269	D-5059-A-07-100ML	278
CLP-023R-WL-4X-10ML	137	CLP-BN-MS-PAK	136	CLP-PS-PAK	127	C-SCA-03	11	D-2622-LL-300X-100ML	269	D-5059-A-CAL-100ML-SET	278
CLP-023R-WL-4X-25ML	137	CLP-BNS	133, 232	CLP-SP1-AA	334	C-SCA-04	11	D-2622-LL-400X-100ML	269	D-5059-C-01-100ML	278
CLP-023R-WL-4X-100ML	137	CLP-BNS-3-2X	133	CLP-SP2-AA	334	C-SCA-05	11	D-2622-LL-500X-100ML	269	D-5059-C-02-100ML	278
CLP-024R	137	CLP-BNS-10X	133	CLP-SPS-01-1	350	C-SCA-06	11	D-2622-LL-600X-100ML	269	D-5059-C-03-100ML	278
CLP-024R-4X	137	CLP-BNS-10X-PAK	133	CLP-SPS-1-SET	350	C-SCA-DIOXLK	11	D-2622-LL-700X-100ML	269	D-5059-C-04-100ML	278
CLP-024R-10X	137	CLP-BNS-PAK	133, 232	CLP-SPS-02-1	350	C-SCA-SET	11	D-2622-LL-800X-100ML	269	D-5059-C-05-100ML	278
CLP-024R-30X	137	CLP-BTEX	127, 128, 322	CLP-TCLSV	133	C-WCFS	12	D-2622-LL-900X-100ML	269	D-5059-C-06-100ML	278
CLP-024R-160X	137	CLP-BTEX-10X	127, 128, 322	CLP-TS	131, 134, 153, 177, 179	C-WDM	15	D-2622-LL-1000X-100ML	269	D-5059-C-07-100ML	278
CLP-024R-WL-4X-10ML	137	CLP-BTEX-10X-PAK	127, 128, 322	CLP-TS-PAK	131, 134, 153, 177, 179	C-WDM-PAK	15	D-2622-LL-1100X-100ML	269	D-5059-C-CAL-100ML-SET	278
CLP-024R-WL-4X-25ML	137	CLP-BTEX-PAK	127, 128, 322	CLP-VER-1-SET	350	C-WHO-01	12	D-2622-LL-1200X-100ML	269	D-5059-IS-10ML-PAK	278
CLP-024R-WL-4X-100ML	137	CLP-CAL-01-1	349	CLP-VER-5-SET	350	C-WNN	12	D-2622-LL-BL-100ML	269	D-5059-IS-100ML	278
CLP-025	138	CLP-CAL-1-SET	349	CLP-VER-R-1-SET	350	C-WNN-PAK	12	D-2622-LL-CAL-100ML-SET	269	D-5134-92-ALK	278
CLP-025-PAK	138	CLP-CAL-02-1	349	CLP-VER-R-5-SET	350			D-2789-CTM	272	D-5134-92-CEM	278
CLP-025-WL	138	CLP-CAL-03-1	349	CLP-VOC-SET	128			D-2789-CTM-PAK	272	D-5134-92-LCM-PAK	278
CLP-025-WL-10ML	138	CLP-CAL-04-1	349	CP-06N-10X-5	327			D-2887	272, 298	D-5134-92-NAP	278
CLP-026-R2	138	CLP-CAL-05-1	349	CPW-100	88			D-2887-REFOIL	272	D-5134-92-REF	278
CLP-026-R2-10X	138	CLP-CAL-06-1	349	C-QME-01	242, 9			D-3120-92-CAL-SET	269, 273	D-5184-91-AL-1	370
CLP-026-R2-10X-PAK	138	CLP-CAL-07-1	349	CRM001-100G	384			D-3230-89-1	383	D-5184-91-AL-5	370
CLP-026-R2-PAK	138	CLP-CAL-AA	334	CRM002-100G	384			D-3230-89-5	383	D-5184-91-SI-1	370
CLP-026-R2-WL	138	CLP-CCV-01-1	350	CRM004-100G	384			D-3237-CAL-SET	383	D-5184-91-SI-5	370
CLP-026-R2-WL-25ML	138	CLP-CCV-01-5	350	CRM005-50G	384			D-3524-CAL-SML-SET	273	D-5184-91-TA-5	370
CLP-026-R2-WL-50ML	138	CLP-CCV-1-SET	350	CRM006-50G	384			D-3524-CAL-10ML-SET	273	D-5186-91-PM	307
CLP-027	134	CLP-CCV-02-1	350	CRM009-100G	384			D-3524-CR	273	D-5186-91-PM-0.4X	278
CLP-027-PAK	134	CLP-CCV-02-5	350	CRM010-100G	384			D-3524-CR-PAK	273	D-5186-96-DLC-SET	278
CLP-027-R2	134	CLP-CCV-03-1	350	CRM011-100G	384			D-3524-IS-10ML	273	D-5186-96-PM	278
CLP-027-R2-PAK	134	CLP-CCV-03-5	350	CRM012-100G	384			D-3524-IS-10ML-PAK	273	D-5186-96-PM-PAK	278
CLP-027-R2-WL-10ML	139, 210, 8	CLP-CCV-5-SET	350	CRM013-50G	384			D-3524-QC-10ML	273	D-5307-CR	279
CLP-027-WL-10ML	139, 210	CLP-CRDL-01-1	351	CRM014-50G	384			D-3605-91-R1-1	383	D-5307-CR-PAK	279
CLP-028	138	CLP-CRDL-1-SET	351	CRM015-50G	384			D-3606-25ML-SET	274	D-5307-IS-10ML	279
CLP-028-PAK	138	CLP-CRDL-02-1	351	CRM016-50G	384			D-3606/IS-2ML-SET	274	D-5307-IS-10ML-PAK	279
CLP-028-WL	138	CLP-FC	74, 124, 138	CRM017-20G	384			D-3606/IS-2ML-SET-PAK	274	D-5307-QUAL	279
CLP-028-WL-10ML	138	CLP-FC-PAK	138	CRM018-50G	384			D-3606/IS2-R1-SET	274	D-5307-QUAL-PAK	279
CLP-029	134	CLP-FC-WL-10ML	139, 210	CRM019-50G	384			D-3606/IS2-SET	274	D-5307-QUANT	279
CLP-029-0.75X	134	CLP-HC-A-R	132, 225	CRM020-50G	384			D-3606/IS2-SET-PAK	274	D-5307-QUANT-PAK	279
CLP-029-0.75X-PAK	134	CLP-HC-A-R5	136	CRM021-100G	384			D-3606/IS-SET	274	D-5441	280
CLP-029-PAK	134	CLP-HC-A-R5-PAK	136	CRM022-20G	384			D-3606-QC-25ML	274	D-5441-5ML	280
CLP-030	134	CLP-HC-BN	176	CRM023-50G	384			D-3606-QC-25ML-PAK	274	D-5441-5ML-PAK	280
CLP-030-PAK	134	CLP-HC-BN-PAK	176	CRM024-50G	384			D-3606-QC-IS2-25ML	274	D-5441-10X	280
CLP-031-R	134, 136	CLP-HC-BN-R	132, 176, 225	CRM025-50G	384			D-3606-QC-IS2-25ML-PAK	274	D-5441-10X-5ML	280
CLP-031-R2	134	CLP-HC-BN-R-PAK	132, 176, 225	CRM026-50G	384			D-3606-QC/IS-10ML	274	D-5441-10X-5ML-PAK	280
CLP-031-R2-PAK	134	CLP-HC-BN-SET	132, 176, 225	CRM027-50G	384			D-3606-QC/IS-10ML-PAK	274	D-5441-10X-PAK	280
CLP-031-R-PAK	134, 136	CLP-HC-BN-SET-PAK	132, 176, 225	CRM028-50G	384			D-3710	275	D-5441-PAK	280
CLP-031-R-WL-25ML	230, 136	CLP-HC-SV-MIX1	136	CRM029-50G	384			D-3710-PAK	275	D-5441-QUAL	280
CLP-031-R-WL-50ML	230, 136	CLP-HC-SV-MIX2	136	CRM030-50G	384			D-3710-QUAL	275	D-5441-QUAL-R1	280
CLP-032-H-5X	212	CLP-HC-SV-MIX4	136	CRM031-40G	384			D-3710-QUAL-PAK	275	D-5441-RES	280
CLP-032-R	137, 186, 207, 211	CLP-HC-SVR-SET	136	CRM033-50G	384			D-3798-10ML	275	D-5441-RES-5ML	280
CLP-032-R-01	117	CLP-HC-X1	225	CRM034-50G	384			D-3798-10ML-PAK	275	D-5441-RES-SML-PAK	280
CLP-032-R-PAK	137, 207, 211	CLP-HG-AA	334	CRM036-50G	384			D-3798-IS	275	D-5441-RES-PAK	280
CLP-032R-WL-0.2X-10ML	138	CLP-IA-1-SET	351	CRM041-30G	384			D-3798-IS-PAK	275	D-5442	281
CLP-032R-WL-0.2X-50ML	138	CLP-IA-5-SET	351	CRM042-50G	384			D-3831-1	383	D-5442-CR-PAK	281
CLP-032R-WL-5X-10ML	207	CLP-ICV-01-1	350	CRM043-50G	384			D-4291-93	69, 276	D-5442-R1	281, 310
CLP-032R-WL-5X-50ML	207	CLP-ICV-01-5	350	CRM044-50G	384			D-4291-93-PAK	276	D-5442-RT1	281
CLP-032R-WL-5X-100ML	207	CLP-ICV-01-R-1	350	CRM045-50G	384			D-4420-94	276	D-5442-RT2	281
CLP-032R-WL-10ML	207	CLP-ICV-01-R-5	350	CRM046-50G	384			D-4420-94-PAK	276	D-5443-93-HTM	281
CLP-032R-WL-50ML	207	CLP-ICV-AA	334	CRM048-50G	384			D-4420-CAL-SET	276	D-5453-HL-SET	281
CLP-032R-WL-100ML	207	CLP-LC-IS	129	CRM049-50G	384			D-4629-91-HB-1X	276	D-5453-LL-SET	281
CLP-033	134, 136	CLP-LC-IS-10X	129	CRM050-20G	384			D-4629-91-HB-10X	276	D-5453-ML-SET	281
CLP-033-PAK</											

Catalog Number Index

D-5480-CR-PAK	282	DIN38407-2-PEST	252	DRH-TX-002-D-SET	319	DYE-049N	104	EN-14105-04	300, 304	FAME-003-R1-KIT	96
D-5480-IS-SML	282	DIN38407-8-PAH	247	DRH-TX-003-20X	319	DYE-049S	104	EN-15721-A	306	FAME-005-R1-KIT	96
D-5480-IS-SML-PAK	282	DIN38407-9-BENZ	246	DRH-TX-003-20X-PAK	319	DYE-051N	104	EN-15721-A-IS	306	FAMQ-001	96
D-5501-94-SET	282	DIN38407-14-ACID	252	DRH-TX-003-CNM	319	DYE-051S	104	EN-15721-A-SET	306	FAMQ-002	96
D-5580-95-CAL-10ML-SET	283	DIN38407-14-ME	252	DRH-TX-003-CNM-PAK	319	DYE-053S	104	ENISO9377-2-1	253, 310	FAMQ-004	96
D-5580-95-CAL-IS-SET	283	DIN38407-17	43, 246	DRH-TX-003-FCS	319	DYE-055N	105	ENISO9377-2-2	253, 310	FAMQ-005	96
D-5580-QC-10ML	283	DIN38407-18	247	DRH-TX-003-FCS-PAK	319	DYE-055S	105	ENISO9377-2-3	253, 310	FBDE-1001S	33
D-5580-QC-10ML-PAK	283	DIN38407-21-A	246, 85	DRH-TX-003-SET	319	DYE-056N	104	ENISO9377-2-4	253, 310	FBDE-1001S-0.5X	33
D-5580-QC-R1-10ML	283	DIN38407-21-B	246, 85	DRH-TX-003-SS1	319	DYE-057N	104	ENISO10695-PEST	252	FBDE-2001S	33
D-5580-QC-R1-10ML-PAK	283	DIN38407-22	252	DRH-TX-003-SS1-PAK	319	DYE-057S	104	EPH-WA-10X	321	FBDE-2001S-0.5X	33
D-5600-01-1	370	DIN38407-25	248	DRO-AK-102/103AA-RT	315	DYE-058N	104	EPH-WA-10X-PAK	321	FBDE-2002S	33
D-5600-BLH-5	370	DIN38414-23	247	DRO-AK-102/103AA-RT-PAK315	315	DYE-058S	104	EPH-WA-ALI	321	FBDE-2002S-0.5X	33
D-5600-BLH-L-VAP	370	DINEN-12673	252	DRO-AK-102/103AA-SS	315	DYE-059N	104	EPH-WA-ALI-PAK	321	FBDE-2003S	33
D-5600-LIB-1	370	DINENISO-10301	246	DRO-AK-102/103AA-SS-PAK315	315	DYE-059S	104	EPH-WA-ALI-R1	321	FBDE-2003S-0.5X	33
D-5600-LIB-5	370	DINENISO-11885-1-SET	370	DRO-AK-102AA	315	DYE-060N	104	EPH-WA-ALI-R1-PAK	321	FBDE-3001S	33
D-5708-A-10X	379	DINENISO-11885-5-SET	370	DRO-AK-102AA-PAK	315	DYE-060S	104	EPH-WA-ARO	321	FBDE-3001S-0.5X	33
D-5708-B-5	379	DINENISO-17495	252	DRO-AK-102-DCS	314	DYE-061N	105	EPH-WA-ARO-PAK	321	FBDE-3002S	33
D-5708-B-10X-1	379	DINV38407-11-PST	252	DRO-AK-102-DCS-10X	314	DYE-061S	105	EPH-WA-ARO-R1	321	FBDE-3002S-0.5X	33
D-5708-B-10X-5	379	DINV38407-11-PST-PAK	252	DRO-AK-102-DCS-10X-PAK	314	DYE-062N	104	EPH-WA-ARO-R1-PAK	321	FBDE-3003S	33
D-5762-95-1X	287	DRH-001S	323	DRO-AK-102-DCS-10X-R1	314	DYE-062S	104	EPH-WA-FCS	321	FBDE-3003S-0.5X	33
D-5762-95-5X	287	DRH-001S-10X	323	DRO-AK-102-DCS-10X-R1-PAK	314	DYE-063N	104	EPH-WA-FCS-PAK	321	FBDE-3004S	33
D-5762-95-10X	287	DRH-002N	272, 298	DRO-AK-102-DCS-10X-R1-PAK	314	DYE-063S	104	EPH-WA-FCS-R1	321	FBDE-3004S-0.5X	33
D-5762-95-50X	287	DRH-002N-10X	272, 298	DRO-AK-102-DCS-PAK	314	DYE-064S	104	EPH-WA-FCS-R1-PAK	321	FBDE-4001S	33
D-5762-95-100X	287	DRH-002S	323	DRO-AK-102-IS	315	DYE-102N	104, 106	EPH-WA-MS2-20ML	321	FBDE-4001S-0.5X	33
D-5762-95-500X-PAK	287	DRH-002S-R1	272, 275	DRO-AK-102-IS-PAK	315	DYE-103N	104, 106	EPH-WA-MS2-20ML-PAK	321	FBDE-4002S	33
D-5762-95-BL	287	DRH-002S-R1-PAK	272, 275	DRO-AK-102-LCS	314	DYE-103S	104, 106	EXP-GSS	85	FBDE-4002S-0.5X	33
D-5762-95-CAL-SET	287	DRH-002S-R2	272	DRO-AK-102-LCS-10X	314	DYE-104N	104, 106			FBDE-4003S	33
D-5769-ADD-5ML	290	DRH-002S-R2-PAK	272	DRO-AK-102-LCS-10X-PAK	314	DYE-104S	104, 106			FBDE-4003S-0.5X	33
D-5769-ADD-10ML	290	DRH-003S	323	DRO-AK-102-LCS-10X-R1	315	DYE-105N	106			FBDE-4004S	33
D-5769-ADD/IS	291	DRH-004S-R1-5X	316, 323	DRO-AK-102-LCS-10X-R1-PAK	315	DYE-105S	106			FBDE-4004S-0.5X	33
D-5769-ADD/IS-R	292	DRH-004S-R1-5X-PAK	316, 323		315	DYE-106N	104, 106	F-100N	23	FBDE-4005S	33
D-5769-ADD/IS-R2	293	DRH-005S-10X	323	DRO-AK-102-LCS-PAK	314	DYE-106S	104, 106	F-100S	23	FBDE-4005S-0.5X	33
D-5769-CAL-5ML-SET	290	DRH-005S-R1-10X	272	DRO-AK-102-NAS-10X	313, 315	DYE-107N	104, 106	F-102S	23	FBDE-4006S	33
D-5769-CAL-10ML-SET	290	DRH-005S-R1-10X-PAK	272	DRO-AK-102-NAS-10X-PAK	313, 315	DYE-107S	104, 106	F-104S	23	FBDE-4006S-0.5X	33
D-5769-CAL/IS-R2-SET	293	DRH-006-CAL-SET	317		313, 315	DYE-108N	104, 106	F-201N	23	FBDE-4007S	33
D-5769-CAL/IS-R-SET	292	DRH-006S	317	DRO-AK-102-SS	315	DYE-108S	104, 106	F-201S	23	FBDE-4007S-0.5X	33
D-5769-CAL/IS-SET	291	DRH-006S-PAK	317	DRO-AK-102-SS-10X	312, 315	DYE-109N	104, 106	F-300	89	FBDE-5001S	33
D-5769-QC-10ML	290	DRH-006-SS	308, 317, 321	DRO-AK-102-SS-10X-PAK	315	DYE-109S	104, 106	F-301S	23	FBDE-5001S-0.5X	33
D-5769-QC-10ML-PAK	290	DRH-006-SS-PAK	317, 321	DRO-AK-102-SS-PAK	315	DYE-110N	105, 106	F-401S	23	FBDE-5002S	33
D-5769-QC/IS-5ML	291	DRH-007-CAL-R1-SET	317	DRO-AK-102-SS-AZ-8015	312	DYE-110S	105, 106	F-402N	23	FBDE-5002S-0.5X	33
D-5769-QC/IS-5ML-PAK	291	DRH-007S	317	DRO-ORO-AZ-8015-PAK	312	DYE-111N	105, 106	F-402S	23	FBDE-5003S	33
D-5769-QC/IS-R2-5ML	293	DRH-007S-PAK	317	DRO-ORO-AZ-8015-RTV	312	DYE-111S	105, 106	F-403S	23	FBDE-5003S-0.5X	33
D-5769-QC/IS-R2-5ML-PAK	293	DRH-007-SS	307, 317, 321	DRO-ORO-AZ-8015-RTV-PAK312	312	DYE-112S	105, 106	F-502S-0.1X	23	FBDE-5004S	33
D-5769-QC/IS-R-5ML	292	DRH-007-SS-PAK	321	DRO-ORO-AZ-8015-SCS	312	DYE-113N	104, 106	F-701S	23	FBDE-5004S-0.5X	33
D-5769-QC/IS-R-5ML-PAK	292	DRH-008S-R2272, 298, 311, 323		DRO-ORO-AZ-8015-SCS-PAK312	312	DYE-113S	104, 106	F-701S-0.1X	23	FBDE-5005S	33
D-5836-01A-DER	296	DRH-008S-R2-PAK	272, 298, 311, 323	D-WD	235, 242, 22	DYE-114N	104, 106	F-801N	19, 23	FBDE-5005S-0.5X	33
D-5836-01-DER	296			D-WD-2.5X	235, 242, 22	DYE-114S	104, 106	F-801S	19, 23	FBDE-5006S	33
D-5836-01N	296	DRH-009S	313	DYE-001S	104, 106	DYE-115N	104, 106	FAC-001N	92	FBDE-5006S-0.5X	33
D-5836-02A-DER	296	DRH-009S-PAK	313	DYE-002S	104, 106	DYE-115S	104, 106	FAC-001S-T	92	FBDE-5007S	33
D-5836-02-DER	296	DRH-010S	324	DYE-003N	104	DYE-116N	105	FAC-002N	92	FBDE-5007S-0.5X	33
D-5836-02N	296	DRH-010S-PAK	324	DYE-003S	104, 106	DYE-116S	105	FAC-002S-T	92	FBDE-5008S	33
D-5836-03A-DER	296	DRH-FL-SS	307, 316	DYE-004S	104, 106	DYE-117N	105	FAC-003N	92	FBDE-5008S-0.5X	33
D-5836-03-DER	296	DRH-FL-SS-3X	307, 316	DYE-005S	104, 106	DYE-117S	105	FAC-003S-T	92	FBDE-6001S	33
D-5836-03N	296	DRH-FL-SS-3X-PAK	316	DYE-006S	104, 106	DYE-118S	105	FAC-004N	92	FBDE-6001S-0.5X	33
D-5836-04A-DER	296	DRH-FL-SS-PAK	316	DYE-007S	104, 106	DYE-120N	104	FAC-004S-T	92	FBDE-6002S	33
D-5836-04-DER	296	DRH-FL-SS-R1	307	DYE-008S	104, 106	DYE-120S	104	FAC-005N-25MG	92	FBDE-6002S-0.5X	33
D-5836-04N	296	DRH-FTRPH	316, 323	DYE-009S	104, 106	DYE-121N	104	FAC-005S-T	92	FBDE-6003S	33
D-5836-DER-5ML-VAP	296	DRH-FTRPH-0.1X	316	DYE-010S	104, 106	DYE-121S	104	FAC-IS-T	92	FBDE-6003S-0.5X	33
D-5836-SET	296	DRH-FTRPH2	323	DYE-011S	104, 106	DYE-122N	104	FAC-SET	92	FBDE-6004S	33
D-5863-01A-10X-1	379	DRH-FTRPH2-PAK	323	DYE-012S	104, 106	DYE-122S	104	FAEE-001N	97	FBDE-6004S-0.5X	33
D-5863-95B-10X-1	379	DRH-FTRPH-PAK	316, 323	DYE-013S	104, 106	DYE-123N	104	FAEE-001S	97	FBDE-7001S	33
D-6258-5ML-SET	297	DRH-FTRPH-SET	323	DYE-014S	104, 106	DYE-123S	104	FAEE-002N	97	FBDE-7001S-0.5X	33
D-6258-CONC-5ML	297	DRH-FTRPH-SET-PAK	323	DYE-015S	104, 106	DYE-124N	104	FAEE-002S	97	FBDE-8001S	33
D-6296-BL	298	DRH/GRH-FL-SS	316	DYE-016S	104, 106	DYE-124S	104	FAEE-003N	97	FBDE-8001S-0.5X	33
D-6296-CAL1	298	DRH/GRH-FL-SS-PAK	316	DYE-017S	104, 106	DYE-125N	104	FAEE-003S	97	FBDE-9001S	33
D-6296-CAL1-PAK	298	DRH/GRH-FL-SS-R2	316	DYE-018S	104, 106	DYE-125S	104	FAEE-004N	97	FBDE-9001S-0.5X	33
D-6296-CAL2	298	DRH/GRH-FL-SS-R2-PAK	316	DYE-019S	104, 106	DYE-127N	104	FAEE-004S	97	FD2-W25-10X	307, 309
D-6296-CAL2-PAK	298	DRH-MA-FSS-10ML	317	DYE-020N	105			FAEE-005N	97	FD2-W25-R1-10X	307, 309
D-6296-VER1	298	DRH-MA-FSS-50X	317	DYE-020S	105			FAEE-005S	97	FD2-W50-10X	307, 309
D-6296-VER2	298	DRH-MA-FSS-50X-PAK	317	DYE-021N	105			FAEE-006N	97	FD2-W50-R1-10X	307, 309
D-6296-VER-SET	298	DRH-MA-MS	317	DYE-021S	105			FAEE-006S	97	FD2-W75-10X	307, 309
D-6296-VER-SET-PAK	298	DRH-MA-MS-10X	317	DYE-022N	105			FAEE-007N	97	FD2-W75-R1-10X	307, 309
D-6379-10X-SET	299	DRH-MA-MS-10X-PAK	317	DYE-022S	105	E-001S	216	FAEE-007S	97	FDA-PROP-001A	92
D-6379-10X-SET-PAK	299	DRH-MA-MS-40X	317	DYE-023N	105	E-004S	77, 216	FAEE-008N	97	FDA-PROP-001B	92
D-6379-SET	299	DRH-MA-MS-40X-PAK	317	DYE-023S	105	E-005S	77, 216	FAEE-008S	97	FDA-PROP-001C	92
D-6379-SET-PAK	299	DRH-MA-MS-PAK	317	DYE-024N	105	E-006S	77, 216	FAEE-009N	97	FDA-PROP-001-CHK	92
D-6379-SRS	299	DRH-MA-SS	317, 321	DYE-024S	105	E-007S	77, 216	FAEE-009S	97	FDA-PROP-001D	92
D-6379-SRS-PAK	299	DRH-MA-SS-10X	317, 321	DYE-025N	105	E-008S	77, 216	FAEE-010N	97	FDA-PROP-001-IS	92
D-6379-SRS-R1	299	DRH-MA-SS-100X	317, 321	DYE-025S	105	E-009S	77, 216	FAEE-010S	97	FDA-PROP-001-SET	92
D-6379-SRS-R1-PAK	299	DRH-MA-SS-100X-PAK	317, 321	DYE-026N	105	E-010S	77, 216	FAEE-011N	97	FIA-ARO	267
D-6428-R1-100ML-SET	299	DRH-MS-ASL	317	DYE-026S	105	E-011S	77, 216	FAEE-011S	97	FIA-ARO-5ML	267
D-6428-R1-SET	299	DRH-MS-ASL-PAK	317	DYE-027N	104	E-012S	77, 216	FAEE-012N	97	FIA-CAL-01	267
D-6428-R2-100ML-SET	299	DRH-NJ-001S	313	DYE-027S	104	E-013S	77, 216	FAEE-012S	97	FIA-CAL-02	267
D-6428-R2-SET	299	DRH-NJ-002S	313	DYE-028N	104	E-014S	77, 216	FAEE-013N	97	FIA-CAL-03	267
D-6550-CONC	299	DRH-PA-001	313	DYE-028S	104	E-015S	77, 216	FAEE-013S	97	FIA-CAL-04	267
D-6550-CONC-5ML	299	DRH-PA-001-PAK	313	DYE-029S	105	E-016S	77, 216	FAEE-014N	97	FIA-CAL-05	267
D-7485-1	261	DRH-SS	308, 316, 323	DYE-030N	104	E-017S	77, 216	FAEE-014S	97	FIA-CAL-06	267
D-7485-2	261	DRH-SS-PAK	316, 323	DYE-030S	104	E-018S	77, 216	FAEE-015N	97	FIA-CAL-07	267
D-7485-3	261	DRH-TX-001-10X	319	DYE-031S	104	E-019S					

Catalog Number Index

FL-W75-10X	307, 309	FRS-051N	37	FU-020-H-40X	307	GRO-AK-101-GSC-R1-PAK	314	H-134S	39	H-208S	40
FL-0003	262	FRS-051S	37	FU-021-D-40X	308	GRO-AK-101-IS-10X	314	H-135N	39	H-209S	40
FL-0004-CA	262	FRS-052N	36	FU-022	307	GRO-AK-101-IS-10X-PAK	314	H-135S	39	H-210S	40
FL-0004-CR	262	FRS-052S	36	FU-022-40X	307	GRO-AK-101-LCS	314	H-138S	39	H-211S	40
FL-0005-NB	262	FRS-053S-0.5X	37	FU-022-D-40X	307, 308	GRO-AK-101-LCS-PAK	314	H-139S	39	H-212S	40
FL-0102	262	FRS-054N	37	FU-025-D-40X	308	GRO-AK-101-NAS-10X	314	H-140N	39	H-213S	40
FL-OADD	262	FRS-054S	37	FU-025-H	308	GRO-AK-101-NAS-10X-PAK	314	H-140S	39	H-214S	40
FRS-001N	38	FRS-057N	36	FU-025-H-40X	308	GRO-AK-101-SS	314	H-141S	39	H-215S	40
FRS-001S	38	FRS-057S	36	FU-026-D-40X	308	GRO-AK-101-SS-10X	314	H-142N-5MG	40	H-216S	40
FRS-002N	38	FRS-061S-0.5X	34	FU-026-H	308	GRO-AK-101-SS-10X-PAK	314	H-142S	40	H-217S	40
FRS-002S	38	FRS-062S-0.5X	34	FU-026-H-40X	308	GRO-AK-101-SS-100X	314	H-144N	40	H-218S	40
FRS-003N	38	FRS-063N	37	FU-027-D-40X	308	GRO-AK-101-SS-100X-PAK	314	H-144S	40	H-219S	40
FRS-003S	38	FRS-063S	37	FU-027-H	308	GRO-AK-101-SS-PAK	314	H-146N	40	H-220S	40
FRS-004N	38	FRS-064N	36	FU-027-H-40X	308	GS-001N	94	H-146S	40	H-221S	40
FRS-004S	38	FRS-064S-0.5X	36	FU-028-D-40X	308	GS-002N	94	H-148N	40	H-222N	40
FRS-005N	38	FRS-065N	36	FU-028-H	308	GS-003N	94	H-148S	40	H-222S	40
FRS-005S	38	FRS-065S	36	FU-028-H-40X	308	GS-004N	94	H-149N	40	H-223N	40
FRS-006S	37, 89	FRS-066S	37	FU-029-D	307	GS-005N	94	H-149S	40	H-223S	40
FRS-007N	37	FRS-067N	36	FU-029-D-40X	307, 308	GS-006N	94	H-152N	19	H-224S	40
FRS-007S	37	FRS-067S	36	FU-030-D	307	GS-007N	94	H-152S	40	H-225N	40
FRS-008N	37	FRS-068N	36	FU-030-D-40X	307, 308	GS-008N	94	H-156N	40	H-225S	40
FRS-008S	37	FRS-068S	36	FU-032-D	307	GS-009N	94	H-156S	40	H-226N	40
FRS-009N	29, 37	FRS-069N	36	FU-032-D-40X	307	GS-010N	94	H-157N	40	H-226S	40
FRS-009S	29, 37	FRS-069S	36			GS-011N	94	H-157S	40	H-227S	40
FRS-010N	37	FRS-070N	36			GS-012N	94	H-158N	40	H-228S	40
FRS-010S	37	FRS-070S	36			GS-013N	94	H-158S	40	H-229N	40
FRS-011N	36, 37	FRS-071N	37			GS-014N	94	H-159N	39	H-229S	40
FRS-011S	36, 37	FRS-071S	37			GS-015N	94	H-159S	39	H-230N	40
FRS-012N	37	FRS-072N	37			GS-016N	94	H-161N	39	H-230S	40
FRS-012S	37	FRS-072S	37			GS-017N	94	H-161S	39	H-231N	40
FRS-013N	37	FRS-073N	37			GS-018N	94	H-162S	40	H-231S	40
FRS-013S	37	FRS-073S	37			GS-019N	94	H-165S	40	H-232N	40
FRS-014N	37	FRS-074N	36			GS-020N	94	H-169N	39	H-232S	40
FRS-014S	37	FRS-074S	36			GS-021N	94	H-169N-ACS	39	H-233S	40
FRS-015N	38	FRS-075N	36			GS-022N	94	H-169S	39	H-235N	40
FRS-015S	38	FRS-075S	36			GS-023N	94	H-170N	40	H-235S	40
FRS-016S	38	FU-001	307			GS-024N	94	H-170S	40	H-236N	40
FRS-017S	38	FU-001-40X	307			GS-SET	94	H-171N	39	H-236S	40
FRS-018N	37	FU-001-D-40X	307, 308					H-171S	39	H-237N	39
FRS-018S	37	FU-002	307					H-172N	39	H-237S	39
FRS-019N	38	FU-002-40X	307					H-172S	39	H-238N	40
FRS-019S	38	FU-002-D-40X	307, 308					H-173N	39	H-238S	40
FRS-020S	38	FU-003	307					H-173S	39	H-239N	39
FRS-021N	37	FU-003-40X	307					H-174N	39	H-239S	39
FRS-021S	37	FU-003-D-40X	307, 308					H-174S	39	H-241N	40
FRS-022N	38	FU-004	307					H-175N	40	H-242S	39
FRS-022S	38	FU-004-40X	307					H-175S	40	H-243S	40
FRS-023N	37	FU-004-D-40X	307, 308					H-176S	39	H-244N	39
FRS-023S	37	FU-005	307					H-177N	39	H-244S	39
FRS-024N	38	FU-005-40X	307					H-177S	39	H-245N	39
FRS-024S	38	FU-005-D-10X	307, 309					H-178N	39	H-245S	39
FRS-025N	38	FU-005-D-40X	307, 308					H-178S	39	H-246N	40
FRS-025S	38	FU-006	308					H-179S	39	H-246S	40
FRS-026N	38	FU-006-40X	308					H-180N	39	H-247S	39
FRS-026S	38	FU-006-D-40X	308					H-180S	39	H-264N	40
FRS-028N	34, 37	FU-008	307					H-182N-5MG	40	HBDE-1001S-CN	31
FRS-028S	34, 37	FU-008-40X	307					H-182S	40	HBDE-2001S-CN	31
FRS-030N	36	FU-008-D-40X	307, 308					H-183N	39	HBDE-2002S-CN-0.2X	31
FRS-030S	36	FU-009	307					H-183S	39	HBDE-2003S-CN	31
FRS-032N	36	FU-009-40X	307					H-184S	40	HBDE-3001S-CN	31
FRS-032S	36	FU-009-D-10X	307, 309					H-185N	40	HBDE-3002S-CN	31
FRS-033N	34, 38	FU-009-D-40X	307, 308					H-185S	40	HBDE-3003S-CN	31
FRS-033S	34, 38	FU-010	307					H-186N	40	HBDE-3004S-CN	31
FRS-034N	36	FU-010-40X	307					H-186S	40	HBDE-3005S-CN	31
FRS-034S	36	FU-010-D-40X	307, 308					H-187N	39	HBDE-3006S-CN	31
FRS-035N	36	FU-011	307					H-187S	39	HBDE-3007S-CN	31
FRS-035S	36	FU-011-40X	307					H-188S	39	HBDE-4001S-CN-0.2X	31
FRS-036N	37	FU-011-D-40X	307, 308					H-189N	39	HBDE-4002S-CN-0.2X	31
FRS-036S	37	FU-012	307					H-189S	39	HBDE-4003S-CN	31
FRS-037N	36, 37	FU-012-40X	307					H-190N	39	HBDE-4004S-CN	31
FRS-037S	36, 37	FU-012-D-40X	307, 308					H-190S	39	HBDE-4005S-CN-0.2X	31
FRS-038N	36	FU-013	307					H-191S	39	HBDE-4005S-T-0.2X	31
FRS-038S	36	FU-013-40X	307					H-192S	39	HBDE-4006S-CN	31
FRS-039N	36	FU-013-D-40X	307, 308					H-193S	39	HBDE-4006S-CN-0.2X	31
FRS-039S	36	FU-014	307					H-194S	39	HBDE-4006S-T	31
FRS-040N	36	FU-014-40X	307					H-195S	39	HBDE-4006S-T-0.2X	31
FRS-040S	36	FU-014-D-40X	307, 308					H-197N	39	HBDE-4008S-CN	31
FRS-041N	36	FU-015	307					H-197S	39	HBDE-4009S-CN	31
FRS-041S	36	FU-015-40X	307					H-198N	39	HBDE-4010S-CN	31
FRS-042N	36	FU-015-D-40X	307, 308					H-198S	39	HBDE-4011S-CN	31
FRS-042S	36	FU-016	307					H-199N	39	HBDE-5001S-CN-0.2X	31
FRS-043N	36	FU-016-40X	307					H-199S	39	HBDE-5002S-CN-0.2X	31
FRS-043S	36	FU-016-D-40X	307, 308					H-200N	39	HBDE-5003S-CN-0.2X	31
FRS-044N	36	FU-017	307					H-200S	39	HBDE-5004S-CN-0.2X	31
FRS-044S	36	FU-017-40X	307					H-201N	39	HBDE-5005S-CN-0.2X	31
FRS-045N	36	FU-017-D-10X	307, 309					H-201S	39	HBDE-5006S-CN-0.2X	31
FRS-045S	36	FU-017-D-40X	307, 308					H-202N	39	HBDE-5007S-CN-0.2X	31
FRS-046N	36	FU-018-D-40X	308					H-202S	39	HBDE-5008S-CN	31
FRS-046S	36	FU-018-H	308					H-203N	39	HBDE-5009S-CN	31
FRS-047N	36	FU-018-H-40X	308					H-203S	39	HBDE-5010S-CN	31
FRS-047S	36	FU-019-D-40X	308					H-204N	40	HBDE-5011S-CN	31
FRS-048S	36	FU-019-H	308					H-204S	40	HBDE-6001S-CN-0.2X	31
FRS-049S	36	FU-019-H-40X	308					H-205S	40	HBDE-6002S-CN-0.2X	31
FRS-050N	37	FU-020-D-40X	307, 308					H-206S	40	HBDE-6003S-CN-0.2X	31
FRS-050S	37	FU-020-H	307					H-207S	40	HBDE-6004S-CN-0.2X	31

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Catalog Number Index

HBDE-6006S	31	HPCB-5003S	17	IC-CITR-10X-1	335	IC-NO2-1X-1	335, 337	ICP-14N-1	327	ICP-30N-10X-5	328
HBDE-6006S-CN-0.2X	31	HPCB-5004N	17	IC-CI-1X-1	335	IC-NO2-1X-5	335	ICP-14N-5	327	ICP-30N-10X-20ML	328
HBDE-7001S-CN	31	HPCB-5004S	17	IC-CI-1X-5	335	IC-NO2-2X-1	335	ICP-14N-10X-0.5	327	ICP-31N-1	328
HBDE-7002S-CN	31	HPCB-5005N	17	IC-CI-2X-1	335	IC-NO2-2X-5	335	ICP-14N-10X-1	327	ICP-31N-5	328
HBDE-7003S-CN	31	HPCB-5005S	17	IC-CI-2X-5	335	IC-NO2-10X-1	335, 337	ICP-14N-10X-5	327	ICP-31N-10X-0.5	328
HBDE-7004S-CN-0.2X	31	HPCB-5006N	17	IC-CI-10X-1	335	IC-NO2-10X-5	335	ICP-14N-10X-20ML	327	ICP-31N-10X-1	328
HBDE-8001S-CN	31	HPCB-5006S	17	IC-CL-10X-1	339	IC-NO2-N-1X-1	336, 337	ICP-15N-1	327	ICP-31N-10X-5	328
HBP-001N	18	HPCB-5007N	17	IC-CI-10X-5	335	IC-NO2-N-1X-5	336	ICP-15N-5	327	ICP-31N-10X-20ML	328
HBP-001S	18	HPCB-5007S	17	IC-ELU-01-0.5	336	IC-NO2-N-10X-1	336, 339	ICP-15N-10X-0.5	327	ICP-32N-1	328
HBP-002N	18	HPCB-5008S	17	IC-ELU-01-0.5-PAK	336	IC-NO2-N-10X-5	336	ICP-15N-10X-1	327	ICP-32N-5	328
HBP-002S	18	HPCB-5009S	17	IC-ELU-01-1	336	IC-NO3-1X-1	335	ICP-15N-10X-5	327	ICP-32N-10X-0.5	328
HBP-003N	18	HPCB-5010S	17	IC-ELU-01-1-PAK	336	IC-NO3-1X-5	335	ICP-15N-10X-20ML	327	ICP-32N-10X-1	328
HBP-003S	18	HPCB-6001N	17	IC-ELU-02-0.5	336	IC-NO3-2X-1	335	ICP-16N-1	327	ICP-32N-10X-5	328
HBP-004N	18	HPCB-6001S	17	IC-ELU-02-0.5-PAK	336	IC-NO3-2X-5	335	ICP-16N-5	327	ICP-32N-10X-20ML	328
HBP-004S	18	HPCB-6002N	17	IC-ELU-02-1	336	IC-NO3-10X-1	335	ICP-16N-10X-0.5	327	ICP-33N-1	328
HBP-006N	18	HPCB-6002S	17	IC-ELU-02-1-PAK	336	IC-NO3-10X-5	335	ICP-16N-10X-1	327	ICP-33N-5	328
HBP-006S	18	HPCB-6003S	17	IC-ELU-03-0.5	336	IC-NO3-N-1X-1	336	ICP-16N-10X-5	327	ICP-33N-10X-0.5	328
HBP-009N	18	HPCB-7001S	17	IC-ELU-03-0.5-PAK	336	IC-NO3-N-1X-5	336	ICP-16N-10X-20ML	327	ICP-33N-10X-1	328
HBP-009S	18	HPCB-7002S	17	IC-ELU-03-1	336	IC-NO3-N-10X-1	336, 339	ICP-17N-1	327	ICP-33N-10X-5	328
HBQ-001S	261	HPCB-7003S	17	IC-ELU-03-1-PAK	336	IC-NO3-N-10X-5	336	ICP-17N-5	327	ICP-33N-10X-20ML	328
HBQ-002S	261	HPCB-7004S	17	IC-F-1X-1	335	IC-OXAL-1X-1	335, 336	ICP-17N-10X-0.5	327	ICP-34N-1	328
HBQ-003S	261	H-QME-01	41, 243	IC-F-1X-5	335	IC-OXAL-1X-5	335, 336	ICP-17N-10X-1	327	ICP-34N-5	328
HBQ-004S	261	HS-001N	307	IC-F-2X-1	335	IC-OXAL-10X-1	335, 336	ICP-17N-10X-5	327	ICP-34N-10X-0.5	328
HBQ-005S	261	HS-001S	307	IC-F-2X-5	335	IC-OXAL-10X-5	335, 336	ICP-17N-10X-20ML	327	ICP-34N-10X-1	328
HBQ-006S	261	HS-001S-40X	307	IC-F-10X-1	335, 339	ICP-01N-1	327	ICP-18N-1	327	ICP-34N-10X-5	328
HBQ-007S	261	HS-001S-D-40X	307, 308	IC-F-10X-5	335	ICP-01N-5	327	ICP-18N-5	327	ICP-34N-10X-20ML	328
HCBDE-4001S	32	HS-002N	307	IC-FORM-1X-1	335, 336	ICP-01N-10X-0.5	327	ICP-18N-10X-0.5	327	ICP-35W-1	328
HCBDE-4001S-0.5X	32	HS-002S	307	IC-FORM-1X-5	335, 336	ICP-01N-10X-1	327	ICP-18N-10X-1	327	ICP-35W-5	328
HCBDE-4002S	32	HS-002S-40X	307	IC-FORM-10X-1	335, 336	ICP-01N-10X-5	327	ICP-18N-10X-5	327	ICP-35W-10X-0.5	328
HCBDE-4002S-0.5X	32	HS-002S-D-40X	307, 308	IC-FORM-10X-5	335, 336	ICP-01N-10X-20ML	327	ICP-18N-10X-20ML	327	ICP-35W-10X-1	328
HCBDE-4003S	32	HS-003N	307	IC-GLYC-10X-1	335	ICP-02N-1	85, 327	ICP-19N-1	328	ICP-35W-10X-5	328
HCBDE-4003S-0.5X	32	HS-003S	307	IC-I-10X-1	335, 339	ICP-02N-5	85, 327	ICP-19N-5	328	ICP-35W-10X-20ML	328
HPCB-1001N	17	HS-003S-40X	307	IC-K-1X-1	338	ICP-02N-10X-0.5	85, 327	ICP-19N-10X-0.5	328	ICP-36N-1	329
HPCB-1001S	17	HS-003S-D-40X	307, 308	IC-K-1X-5	338	ICP-02N-10X-1	85, 327	ICP-19N-10X-1	328	ICP-36N-5	329
HPCB-1002N	17	HS-004N	308	IC-K-2X-1	338	ICP-02N-10X-5	85, 327	ICP-19N-10X-5	328	ICP-36N-10X-0.5	329
HPCB-1002S	17	HS-004S	308	IC-K-2X-5	338	ICP-02N-10X-20ML	327	ICP-19N-10X-20ML	328	ICP-36N-10X-1	329
HPCB-1003N	17	HS-004S-40X	308	IC-K-10X-1	338	ICP-03N-1	327	ICP-20N-1	328	ICP-36N-10X-5	329
HPCB-1003S	17	HS-004S-D-40X	308	IC-K-10X-5	338	ICP-03N-5	327	ICP-20N-5	328	ICP-36N-10X-20ML	329
HPCB-1004N	17	HS-005N	308	IC-LACT-10X-1	335	ICP-03N-10X-0.5	327	ICP-20N-10X-0.5	328	ICP-37N-1	329
HPCB-1004S	17	HS-005S	308	IC-LI-1X-1	338	ICP-03N-10X-1	327	ICP-20N-10X-1	328	ICP-37N-5	329
HPCB-2001N	17	HS-005S-10X	308	IC-LI-1X-5	338	ICP-03N-10X-5	327	ICP-20N-10X-5	328	ICP-37N-10X-0.5	329
HPCB-2001S	17	HS-005S-40X	308	IC-LI-2X-1	338	ICP-03N-10X-20ML	327	ICP-20N-10X-20ML	328	ICP-37N-10X-1	329
HPCB-2002N	17	HS-005S-D-40X	308	IC-LI-2X-5	338	ICP-04N-1	85, 327	ICP-21W-1	328	ICP-37N-10X-5	329
HPCB-2002S	17	HXBOD-01	34	IC-LI-10X-1	338	ICP-04N-5	85, 327	ICP-21W-5	328	ICP-37N-10X-20ML	329
HPCB-2003N	17	HXBOD-02	34	IC-LI-10X-5	338	ICP-04N-10X-0.5	85, 327	ICP-21W-10X-0.5	328	ICP-38W-1	329
HPCB-2003S	17	HXBOD-03	34	IC-MALA-10X-1	335	ICP-04N-10X-1	85, 327	ICP-21W-10X-1	328	ICP-38W-5	329
HPCB-2004N	17			IC-MALE-10X-1	335	ICP-04N-10X-5	85, 327	ICP-21W-10X-5	328	ICP-38W-10X-0.5	329
HPCB-2004S	17			IC-MAN-01-1	337	ICP-04N-10X-20ML	327	ICP-21W-10X-20ML	328	ICP-38W-10X-1	329
HPCB-2005N	17			IC-MAN-02-1	337	ICP-05N-1	327	ICP-22H-1	328	ICP-38W-10X-5	329
HPCB-2005S	17			IC-MAN-03-1	337	ICP-05N-5	327	ICP-22H-5	328	ICP-38W-10X-20ML	329
HPCB-2006N	17	IC-ACET-1X-1	335, 336	IC-MAN-04-1	337	ICP-05N-10X-0.5	327	ICP-22H-10X-0.5	328	ICP-40H-1	329
HPCB-2006S	17	IC-ACET-1X-5	335, 336	IC-MAN-05-R1-1	337	ICP-05N-10X-1	327	ICP-22H-10X-1	328	ICP-40H-5	329
HPCB-3001N	17	IC-ACET-10X-1	335, 336	IC-MAN-06-R1-1	337	ICP-05N-10X-5	327	ICP-22H-10X-20ML	328	ICP-40H-10X-0.5	329
HPCB-3001S	17	IC-ACET-10X-5	335, 336	IC-MAN-07-R1-1	337	ICP-05N-10X-20ML	327	ICP-23N-1	328	ICP-40H-10X-1	329
HPCB-3002N	17	IC-AN-1X-1-SET	335	IC-MAN-08-R1-1	337	ICP-06N-1	327	ICP-23N-5	328	ICP-40H-10X-20ML	329
HPCB-3002S	17	IC-AN-1X-5-SET	335	IC-MAN-09-R1-1	337	ICP-06N-5	327	ICP-23N-10X-0.5	328	ICP-41W-1	329
HPCB-3003N	17	IC-AN-2X-1-SET	335	IC-MAN-10-R1-1	337	ICP-06N-10X-0.5	327	ICP-23N-10X-1	328	ICP-41W-5	329
HPCB-3003S	17	IC-AN-2X-5-SET	335	IC-MAN-11-1	337	ICP-06N-10X-1	327	ICP-23N-10X-5	328	ICP-41W-10X-0.5	329
HPCB-3004N	17	IC-AN-10X-1-SET	335	IC-MAN-12-1	337	ICP-06N-10X-20ML	327	ICP-23N-10X-20ML	328	ICP-41W-10X-1	329
HPCB-3004S	17	IC-AN-10X-5-SET	335	IC-MAN-13-1	337	ICP-07W-1	327	ICP-24N-1	328	ICP-41W-10X-5	329
HPCB-3005N	17	IC-AN-R-10X-1-SET	336	IC-MAN-14-R2-1	337, 339	ICP-07W-5	327	ICP-24N-5	328	ICP-41W-10X-20ML	329
HPCB-3005S	17	IC-AN-R-10X-5-SET	336	IC-MAN-14-R3-1	337	ICP-07W-10X-0.5	327	ICP-24N-10X-0.5	328	ICP-42H-1	329
HPCB-3006N	17	IC-BA-1X-1	338	IC-MAN-15-R2-1	337	ICP-07W-10X-1	327	ICP-24N-10X-1	328	ICP-42H-5	329
HPCB-3006S	17	IC-BA-1X-5	338	IC-MAN-16-R1-1	337	ICP-07W-10X-5	327	ICP-24N-10X-5	328	ICP-42H-10X-0.5	329
HPCB-4001N	17	IC-BA-2X-1	338	IC-MAN-17-R1-1	337	ICP-07W-10X-20ML	327	ICP-24N-10X-20ML	328	ICP-42H-10X-1	329
HPCB-4001S	17	IC-BA-2X-5	338	IC-MAN-18-R1-1	337	ICP-08N-1	327	ICP-25N-1	328	ICP-42H-10X-20ML	329
HPCB-4002N	17	IC-BA-10X-1	338	IC-MCA-01-1	338	ICP-08N-5	327	ICP-25N-5	328	ICP-43N-1	329
HPCB-4002S	17	IC-BA-10X-5	338	IC-MCA-02-1	338	ICP-08N-10X-0.5	327	ICP-25N-10X-20ML	328	ICP-43N-5	329
HPCB-4003N	17	IC-BR-1X-1	335	IC-MCA-03-1	338	ICP-08N-10X-1	327	ICP-26H-1	328	ICP-43N-10X-0.5	329
HPCB-4003S	17	IC-BR-1X-5	335	IC-MCA-04-1	338	ICP-08N-10X-5	327	ICP-26H-5	328	ICP-43N-10X-1	329
HPCB-4004N	17	IC-BR-2X-1	335	IC-MCA-05-1	338	ICP-08N-10X-20ML	327	ICP-26H-10X-0.5	328	ICP-43N-10X-5	329
HPCB-4004S	17	IC-BR-2X-5	335	IC-MCA-06-1	338	ICP-09N-1	327	ICP-26H-10X-1	328	ICP-43N-10X-20ML	329
HPCB-4005N	17	IC-BR-10X-1	335, 339	IC-MG-1X-1	338	ICP-09N-5	327	ICP-26H-10X-20ML	328	ICP-44N-1	329
HPCB-4005S	17	IC-BR-10X-5	335	IC-MG-1X-5	338	ICP-09N-10X-0.5	327	ICP-27N-1	328	ICP-44N-5	329
HPCB-4006N	17	IC-BROM-10X-1	335	IC-MG-2X-1	338	ICP-09N-10X-1	327	ICP-27N-5	328	ICP-44N-10X-0.5	329
HPCB-4006S	17	IC-BROM-10X-5	335	IC-MG-2X-5	338	ICP-09N-10X-5	327	ICP-27N-10X-0.5	328	ICP-44N-10X-1	329
HPCB-4007N	17	IC-CA-1X-1	338	IC-MG-10X-1	338	ICP-09N-10X-20ML	327	ICP-27N-10X-1	328	ICP-44N-10X-5	329
HPCB-4007S	17	IC-CA-2X-1	338	IC-MG-10X-5	338	ICP-11N-1	327	ICP-27N-10X-5	328	ICP-44N-10X-20ML	329
HPCB-4008N	17	IC-CA-2X-5	338	IC-NA-1X-1	338	ICP-11N-5	327	ICP-27N-10X-20ML	328	ICP-45W-1	329
HPCB-4008S	17	IC-CA-10X-1	338	IC-NA-1X-5	338	ICP-11N-10X-0.5	327	ICP-28N-1	328	ICP-45W-5	329
HPCB-4009N	17	IC-CA-10X-5	338	IC-NA-2X-1	338	ICP-11N-10X-1	327	ICP-28N-5	328	ICP-45W-10X-0.5	329
HPCB-4009S	17	IC-CAT-1X-1-SET	338	IC-NA-2X-5	338	ICP-11N-10X-5	327	ICP-28N-10X-0.5	328	ICP-45W-10X-1	329
HPCB-4010N	17	IC-CAT-1X-5-SET	338	IC-NA-10X-1	338	ICP-11N-10X-20ML	327	ICP-28N-10X-1	328	ICP-45W-10X-5	329
HPCB-4010S	17	IC-CAT-2X-1-SET	338	IC-NA-10X-5	338	ICP-12N-1	327	ICP-28N-10X-5	328	ICP-45W-10X-20ML	329
HPCB-4011S	17	IC-CAT-2X-5-SET	338	IC-NH4-1X-1	338	ICP-12N-5	327	ICP-28N-10X-20ML	328	ICP-46H-1	329
HPCB-4012S	17	IC-CAT-10X-1-SET	338	IC-NH4-1X-5	338	ICP-12N-10X-0.5	327	ICP-29N-1	85, 328	ICP-46H-5	329
HPCB-4013S	17	IC-CAT-10X-5-SET	338	IC-NH4-2X-1	338	ICP-12N-10X-1	327	ICP-29N-5	85		

Catalog Number Index

ICP-48H-1	329	ICP-65W-1	330	ICP-MS-29N-1	331	ICP-MS-BLN-1	371	INT-04-5	357	L		
ICP-48H-5	329	ICP-65W-5	330	ICP-MS-30N-0.01X-1	331	ICP-MS-BLN-5	371	INT-1986-1-SET	357		L-001N	74
ICP-48H-10X-0.5	329	ICP-65W-10X-0.5	330	ICP-MS-30N-1	331	ICP-MS-BLW-1	371	INT-1986-5-SET	357		L-002N	75
ICP-48H-10X-1	329	ICP-65W-10X-1	330	ICP-MS-31N-0.01X-1	331	ICP-MS-BLW-5	371	IRT-001S	72, 107		L-003N	75
ICP-48H-10X-20ML	329	ICP-65W-10X-5	330	ICP-MS-31N-1	331	ICP-MS-CAL-1-1	371	IRT-002S	72, 107		L-004N	75
ICP-49N-1	329	ICP-65W-10X-20ML	330	ICP-MS-32N-0.01X-1	331	ICP-MS-CAL-1-SET	371	IRT-003S	72, 107		L-005N	75
ICP-49N-5	329	ICP-66N-1	330	ICP-MS-32N-1	331	ICP-MS-CAL2-1	371	IRT-004S	72, 107		L-006N	76
ICP-49N-10X-0.5	329	ICP-66N-5	330	ICP-MS-33N-0.1X-1	331	ICP-MS-CAL3-1	371	IRT-005S	107		L-007N	75
ICP-49N-10X-1	329	ICP-67N-1	330	ICP-MS-33N-1	331	ICP-MS-CAL4-1	371	ISO6468-PCB	245		L-008N	76
ICP-49N-10X-5	329	ICP-67N-5	330	ICP-MS-34N-0.01X-1	331	ICP-MS-CAL5-1	371	ISO6468-PEST	252		L-009N	76
ICP-49N-10X-20ML	329	ICP-67N-10X-0.5	330	ICP-MS-34N-1	331	ICP-MS-INT-1-SET	372	ISO22032-IS-1-5ML	29, 247		L-010N	76
ICP-50N-1	329	ICP-67N-10X-1	330	ICP-MS-35W-0.01X-1	331	ICP-MS-INTA-1	372	ISO22032-IS-1-10ML	29, 247		L-011N	75
ICP-50N-5	329	ICP-67N-10X-5	330	ICP-MS-35W-1	331	ICP-MS-INTB-1	372	ISO22032-IS-2-5ML	29, 247		L-012N	76
ICP-50N-10X-0.5	329	ICP-67N-10X-20ML	330	ICP-MS-36N-0.01X-1	331	ICP-MS-IS-BI-1	373	ISO22032-IS-2-10ML	29, 247		L-013N	75
ICP-50N-10X-1	329	ICP-68N-1	330	ICP-MS-36N-1	331	ICP-MS-IS-BI-10X-1	373	ISO/DIS9377-4-1	253, 310		L-014N	75
ICP-50N-10X-5	329	ICP-68N-5	330	ICP-MS-37N-0.1X-1	332	ICP-MS-IS-HO-1	373	ISO/DIS9377-4-2	253, 310		L-015N	75
ICP-50N-10X-20ML	329	ICP-68N-10X-0.5	330	ICP-MS-37N-1	332	ICP-MS-IS-HO-10X-1	373	ISO/DIS-22032-SET	29, 247		L-016N	75
ICP-51N-1	329	ICP-68N-10X-1	330	ICP-MS-38W-0.1X-1	332	ICP-MS-IS-IN-1	373	J			L-017N	75
ICP-51N-5	329	ICP-68N-10X-5	330	ICP-MS-38W-1	332	ICP-MS-IS-IN-10X-1	373		J-001	80	L-018N	75
ICP-51N-10X-0.5	329	ICP-68N-10X-20ML	330	ICP-MS-40H-0.1X-1	332	ICP-MS-IS-LI6-1	373		J-002	78	L-018S-CN	75
ICP-51N-10X-1	329	ICP-69N-1	330, 357	ICP-MS-40H-1	332	ICP-MS-IS-LI6-10X-1	373		J-003	78	LPSC-01-1	353
ICP-51N-10X-5	329	ICP-69N-5	330	ICP-MS-41W-0.1X-1	332	ICP-MS-IS-LU-1	373		J-004	78	LPSC-01-5	353
ICP-51N-10X-20ML	329	ICP-69N-10X-0.5	330	ICP-MS-41W-1	332	ICP-MS-IS-LU-10X-1	373		J-005	78	LPSC-01R-1	357
ICP-52W-1	329	ICP-69N-10X-1	330	ICP-MS-42H-0.1X-1	332	ICP-MS-IS-MIX-1-1	373		J-006	78	LPSC-01R-5	357
ICP-52W-5	329	ICP-69N-10X-5	330	ICP-MS-42H-1	332	ICP-MS-IS-RH-1	373		J-007	80		
ICP-52W-10X-0.5	329	ICP-69N-10X-20ML	330	ICP-MS-43N-0.1X-1	332	ICP-MS-IS-RH-10X-1	373		J-009	78		
ICP-52W-10X-1	329	ICP-70N-1	330	ICP-MS-43N-1	332	ICP-MS-IS-SC-1	373		J-010	78		
ICP-52W-10X-5	329	ICP-70N-5	330	ICP-MS-44N-0.1X-1	332	ICP-MS-IS-SC-10X-1	373		J-011	78		
ICP-52W-10X-20ML	329	ICP-70N-10X-0.5	330	ICP-MS-44N-1	332	ICP-MS-IS-TB-1	373		J-012	78	M-001A	168
ICP-53N-1	329	ICP-70N-10X-1	330	ICP-MS-45W-0.1X-1	332	ICP-MS-IS-TB-10X-1	373		J-013	78	M-001B-R	168
ICP-53N-5	329	ICP-70N-10X-5	330	ICP-MS-45W-1	332	ICP-MS-IS-Y-1	373		J-014	80	M-001C	168
ICP-53N-10X-0.5	329	ICP-70N-10X-20ML	330	ICP-MS-46H-0.1X-1	332	ICP-MS-IS-Y-10X-1	373		J-015	80	M-001D	168
ICP-53N-10X-1	329	ICP-71N-1	330	ICP-MS-46H-1	332	ICP-MS-MEMCHKA-R1-SET	372		J-016	80	M-001D-D	168
ICP-53N-10X-5	329	ICP-71N-5	330	ICP-MS-47N-0.1X-1	332	ICP-MS-MEMCHKB-R1	372		J-100	78	M-001E	168
ICP-53N-10X-20ML	329	ICP-71N-10X-0.5	330	ICP-MS-47N-1	332	ICP-MS-MEMCHK-R1-SET	372		J-101	78	M-001E-D	168
ICP-54N-1	329	ICP-71N-10X-1	330	ICP-MS-48H-0.1X-1	332	ICP-MS-QC-1-1	373		J-104	78	M-001F	168
ICP-54N-5	329	ICP-71N-10X-5	330	ICP-MS-48H-1	332	ICP-MS-QC2-1	373		J-105	80	M-001F-D	168
ICP-54N-10X-0.5	329	ICP-71N-10X-20ML	330	ICP-MS-49N-0.1X-1	332	ICP-MS-QC3-1	373		J-106	78	M-001G	168
ICP-54N-10X-1	329	IC-PER-10X-1	335, 336	ICP-MS-49N-1	332	ICP-MS-SPIKE-1-SET	373		J-109	78	M-001G-D	168
ICP-54N-10X-5	329	IC-PHTH-10X-1	335	ICP-MS-50N-0.1X-1	332	ICP-MS-SPIKE-S-1	373		J-111	78	M-001H	168, 172
ICP-54N-10X-20ML	329	ICP-MS-01N-0.01X-1	331	ICP-MS-50N-1	332	ICP-MS-SPIKE-W-1	373		J-112	78	M-001J	168, 172, 177
ICP-55N-1	329	ICP-MS-01N-1	331	ICP-MS-51N-0.1X-1	332	ICP-MS-TUNSOL1-1	372		J-113	78	M-001J-PAK	177
ICP-55N-5	329	ICP-MS-02N-0.01X-1	331	ICP-MS-51N-1	332	ICP-MS-TUNSOL2-1	372		J-115	78	M-001K	168, 172, 177
ICP-55N-10X-0.5	329	ICP-MS-02N-1	331	ICP-MS-52W-0.1X-1	332	IC-PO4-1X-1	335		J-120	80	M-001L	168, 172, 177
ICP-55N-10X-1	329	ICP-MS-03N-0.01X-1	331	ICP-MS-52W-1	332	IC-PO4-1X-5	335		J-121	78	M-001N	168
ICP-55N-10X-5	329	ICP-MS-03N-1	331	ICP-MS-53N-0.01X-1	332	IC-PO4-2X-1	335		J-122	80	M-001P	168
ICP-55N-10X-20ML	329	ICP-MS-04N-0.01X-1	331	ICP-MS-53N-1	332	IC-PO4-2X-5	335		J-127	78	M-001P-D	168
ICP-56W-1	329	ICP-MS-04N-1	331	ICP-MS-54N-0.01X-1	332	IC-PO4-10X-1	335		J-127	78	M-001R	145, 168, 170, 175, 199, 200, 201, 204
ICP-56W-5	329	ICP-MS-05N-0.01X-1	331	ICP-MS-54N-1	332	IC-PO4-10X-5	335		JMHW-001	254	M-001R-0.75X	204
ICP-56W-10X-0.5	329	ICP-MS-05N-1	331	ICP-MS-55N-0.01X-1	332	IC-PO4-P-1X-1	336		JMHW-001-PAK	254	M-001R-0.75X-PAK	204
ICP-56W-10X-1	329	ICP-MS-06N-0.01X-1	331	ICP-MS-55N-1	332	IC-PO4-P-1X-5	336		JMHW-002	254	M-001R-2	68
ICP-56W-10X-5	329	ICP-MS-06N-1	331	ICP-MS-56W-0.01X-1	332	IC-PO4-P-10X-5	336		JMHW-002-PAK	254	M-001R-3	67, 115
ICP-56W-10X-20ML	329	ICP-MS-07W-0.01X-1	331	ICP-MS-56W-1	332	IC-PROP-10X-1	335		JMHW-003	254	M-001R-PAK	170, 175, 200, 201, 204
ICP-57W-1	329	ICP-MS-07W-1	331	ICP-MS-57W-0.01X-1	332	ICS-01-1	345		JY-CAL-ASL-1	363	M-002	12
ICP-57W-5	329	ICP-MS-08N-0.01X-1	331	ICP-MS-57W-1	332	ICS-01-5	345		JY-CAL-ASL-5	363	M-002-PAK	12
ICP-57W-10X-0.5	329	ICP-MS-08N-1	331	ICP-MS-58H-0.01X-1	332	ICS-02-1	345		JY-CALHM-ASL-R1-1	363	M-005A	303
ICP-57W-10X-1	329	ICP-MS-09N-0.01X-1	331	ICP-MS-58H-1	332	ICS-02-5	345		JY-CALHM-ASL-R1-5	363	M-005A-10X	303
ICP-57W-10X-5	329	ICP-MS-09N-1	331	ICP-MS-59N-0.01X-1	332	ICS-03-1	345		JY-CALHM-ASL-R1-5	363	M-005A-10X-PAK	303
ICP-57W-10X-20ML	329	ICP-MS-11N-0.01X-1	331	ICP-MS-59N-1	332	ICS-03-5	345		JY-CHK1-ASL-1	363	M-005A-PAK	303
ICP-58H-1	330	ICP-MS-11N-1	331	ICP-MS-60N-0.01X-1	332	ICS-04-5	345		JY-CHK1-ASL-5	363	M-005B	303
ICP-58H-5	330	ICP-MS-12N-0.01X-1	331	ICP-MS-60N-1	332	ICS-04-1	345		JY-CHK-ASL-1	363	M-005B-10X	303
ICP-58H-10X-0.5	330	ICP-MS-12N-1	331	ICP-MS-61N-0.01X-1	332	ICS-04-5	345		JY-CHK-ASL-5	363	M-005B-10X-PAK	303
ICP-58H-10X-1	330	ICP-MS-13N-0.01X-1	331	ICP-MS-61N-0.1X-1	332	ICS-05-1	345		JY-CHK-ASL-1	363	M-005B-PAK	303
ICP-58H-10X-5	330	ICP-MS-13N-1	331	ICP-MS-62N-0.01X-1	332	ICS-05-5	345		JY-QC7-ASL-1	363	M-005V	303
ICP-58H-10X-20ML	330	ICP-MS-14N-0.1X-1	331	ICP-MS-62N-1	332	ICS-06-1	345		JY-QC7-ASL-5	363	M-005V-10X	303
ICP-59N-1	330	ICP-MS-14N-1	331	ICP-MS-63N-0.01X-1	332	ICS-06-5	345		JY-QC21-ASL-1	363	M-005V-10X-PAK	303
ICP-59N-5	330	ICP-MS-15N-0.1X-1	331	ICP-MS-63N-1	332	ICS-07-1	345		JY-QC21-ASL-5	363	M-005V-PAK	303
ICP-59N-10X-0.5	330	ICP-MS-15N-1	331	ICP-MS-64W-0.01X-1	332	ICS-07-5	345	JY-QC23-ASL-1	363	M-005V-10X	303	
ICP-59N-10X-1	330	ICP-MS-16N-0.01X-1	331	ICP-MS-64W-1	332	IC-S04-1X-1	335	JY-QC23-ASL-5	363	M-005V-10X-PAK	303	
ICP-59N-10X-5	330	ICP-MS-16N-1	331	ICP-MS-65W-0.01X-1	332	IC-S04-1X-5	335	K		M-005V-PAK	303	
ICP-59N-10X-20ML	330	ICP-MS-17N-0.01X-1	331	ICP-MS-65W-1	332	IC-S04-10X-1	335		K-001N	68	M-100	64
ICP-60N-1	330	ICP-MS-17N-1	331	ICP-MS-66N-0.01X-1	332	IC-S04-10X-5	335		K-003N	67	M-200.7-01-1	352
ICP-60N-5	330	ICP-MS-18N-0.01X-1	331	ICP-MS-66N-1	332	IC-S04-10X-1						

Catalog Number Index

M-200.7-R-1-SET	352	M-502-24	68, 117	M-502-57	70, 124	M-507A-PAK	147	M-515-R-PAK	150	M-527-PEST-A	157
M-200.7-SP-01-R	355	M-502-24-10X	68, 117	M-502-57-10X	70, 124	M-507B	147, 154	M-515-SS	77, 150, 219, 220	M-527-PEST-B	157
M-200.7-SP-02-R	355	M-502-25	68, 118	M-502-57N	70	M-507B-PAK	147	M-515-SS-50X	77, 150	M-528-AFS	158
M-200.7-SP-02-R-1	355	M-502-25-10X	68, 118	M-502-58	70, 124	M-507C	147, 154	M-515-SS-PAK	150, 219, 220	M-528-AFS-PAK	158
M-200.7-SP-02-R-5	355	M-502-25N	68	M-502-58-10X	70, 124	M-507C-PAK	147	M-521	152	M-528-CONC	158
M-200.7-SP-03	355	M-502-26	68, 118	M-502-58N	70	M-507D	147, 154	M-521-IS	152	M-528-CONC-PAK	158
M-200.7-SP-05-R	355	M-502-26-10X	68, 118	M-502-59	70, 124	M-507D-PAK	147	M-521-IS-PAK	152	M-528-IS	158
M-200.7-SP-R-SET	355	M-502-26N	68	M-502-59-10X	70, 124	M-507E	147, 154	M-521-SS	152	M-528-IS-PAK	158
M-300.1-SS	337, 339	M-502-27	68, 118	M-502-59N	70	M-507E-PAK	147	M-521-SS-PAK	152	M-528-PTF	158
M-314.0-CMCS-1	336	M-502-27-10X	68, 118	M-502-60	142	M-507F	123	M-524-FS	144, 145, 152, 199	M-528-PTF-PAK	158
M-314.0-MCA-250X-1	336	M-502-27N	68	M-502-60-10X	142	M-507F-R2	147, 154	M-524-FS-PAK	144, 152	M-528-SS	158
M-314.0-SET	336	M-502-28	68, 118	M-502-61	68, 118	M-507F-R2-PAK	147	M-524-IS	144, 145, 152, 254	M-528-SS2	158
M-418	324, 341	M-502-28-10X	68, 118	M-502-61-10X	68, 118	M-507G	147	M-524-IS-269, 119, 144, 145, 152, 199		M-528-SS2-PAK	158
M-418-CON	324, 341	M-502-28N	68	M-502A-R	142, 222, 256	M-507G-PAK	147	M-524-IS-2-10X	69, 119, 152	M-528-SS-PAK	158
M-418-PAK	324, 341	M-502-29	68, 118	M-502A-R2	221	M-507H	147	M-524-IS-2-PAK	144, 152	M-529-IS	84, 158
M-465B-10X	256	M-502-29-10X	68, 118	M-502A-R2-10X	221	M-507H-PAK	147	M-524-IS-PAK	144, 152, 254	M-529-ISFS	84, 158
M-465B-10X-PAK	256	M-502-29N	68	M-502A-R2-10X-PAK	221	M-507IS	124, 147	M-524R-B	152	M-529-MS-SET	84, 158
M-465D-ADD-R	256	M-502-30	68, 118	M-502A-R2/B-10X-SET	221	M-507IS-10X	124, 147	M-524R-B-PAK	152	M-529-SAFS	84, 158
M-465D-SET	256	M-502-30-10X	68, 118	M-502A-R2/B-SET	221	M-507IS-PAK	147	M-524R-C	152	M-529-SIM-SET	84, 158
M-465D-SET-PAK	256	M-502-30N	68	M-502A-R2-B-PAK	221	M-507QC	147	M-524R-C-PAK	152	M-529-SS1	84, 158
M-501	141, 170, 200	M-502-31	68, 118	M-502A-R3	142	M-507QC-PAK	147	M-524R-C-SS	152	M-529-SS1-PAK	84, 158
M-501-10X	141, 170, 200	M-502-31-10X	68, 118	M-502A-R3-10X	142	M-507R-SET	147	M-524R-C-IS-PAK	152	M-529-SS2	84, 158
M-501-10X-PAK	141	M-502-31N	68	M-502A-R-10X	142	M-507SS	69, 118, 147	M-524R-C-IS/SS	152	M-529-SS2-PAK	84, 158
M-501-PAK	141, 170, 200	M-502-32	68, 118	M-502A-R-10X-PAK	142	M-507SS-4X	118, 147	M-524R-C-IS/SS-PAK	152	M-531-01	114, 159
M-501-SET	141	M-502-32-10X	68, 118	M-502A-R/B-10X-SET	142	M-507SS-PAK	147	M-524R-C-PAK	152	M-531-02	114, 159
M-502	142, 203, 221	M-502-32N	68	M-502A-R/B-SET	142, 222	M-508.1-ASL	149, 167	M-524R-C-SS	152	M-531-03	122, 159
M-502-01	67, 115	M-502-33	68, 118	M-502A-R-PAK	142, 256	M-508.1-ASL-PAK	149, 167	M-524R-C-SS-PAK	152	M-531-04	120, 159
M-502-01-10X	67, 115	M-502-33-10X	68, 118	M-502B	142, 170, 197, 200, 221, 222	M-508.1-DS-100X	149	M-524-SS	144, 145, 152, 199	M-531-04-10X	120
M-502-01N	67	M-502-34	68	M-502B-10X	142, 143, 170, 200, 221	M-508.1-DS-100X-PAK	149	M-524-SS-PAK	144, 152	M-531-05	120, 159
M-502-02	67, 115	M-502-34N	68	M-502B-10X-PAK	142, 143, 170, 200, 221	M-508.1-IS	149	M-525-1	153	M-531-06	114, 159
M-502-02-10X	67, 115	M-502-34-R	68, 118, 142, 203	M-502C-02	143	M-508.1-IS-PAK	149	M-525-1-5X	153, 155	M-531-07	114, 159
M-502-02N	67	M-502-34-R-10X68, 118, 142, 203		M-502C-02-PAK	143	M-508.1-QC	149	M-525-1-5X-PAK	153	M-531-08	115, 159
M-502-03	67, 115	M-502-35	69, 119	M-502C-03	143	M-508.1-QC-PAK	149	M-525-1-PAK	153	M-531-09	159
M-502-03-10X	67, 115	M-502-35-10X	69, 119	M-502C-03-PAK	143	M-508.1-SS	20	M-525-2	153	M-531-10	121, 159
M-502-03N	67	M-502-35N	69	M-502C-04	143	M-508.1-SS-PAK	149	M-525-2-5X	153, 155	M-531-11	120, 159
M-502-04	68, 115	M-502-36	69, 120	M-502C-04-PAK	143	M-508.1-X1	149	M-525-2-5X-PAK	153	M-531-IS	115, 159
M-502-04-10X	68, 115	M-502-36-10X	69, 120	M-502C-05	143	M-508.1-X1-PAK	149	M-525-2-CP-ASL	156	M-531M	159
M-502-04N	68	M-502-36N	69	M-502C-05-PAK	143	M-508.1-X2	149	M-525-2-CP-ASL-PAK	156	M-531M-PAK	159
M-502-05	67, 115	M-502-37	69, 120	M-502C-06	143	M-508.1-X2-PAK	149	M-525-2-FS-ASL	156	M-531-QC-R	159
M-502-05-10X	67, 115	M-502-37-10X	69, 120	M-502C-06-PAK	143	M-508A-1	148	M-525-2-FS-ASL-PAK	156	M-531-REG	167
M-502-05N	67	M-502-37N	69	M-502C-07	166	M-508A-1-PAK	148	M-525-2-IS	154, 157	M-531-REG-ASL	159, 167
M-502-06	67, 115	M-502-38	69, 120	M-502C-08	166	M-508A-2	148	M-525-2-IS-PAK	154, 157	M-531-REG-ASL-PAK	159, 167
M-502-06-10X	67, 115	M-502-38-10X	69, 120	M-502C-09	143	M-508A-2-PAK	148	M-525-2-IS/SS	154	M-531-SET	159
M-502-07	67, 115	M-502-38N	69	M-502C-10	166	M-508-DS-100X	148	M-525-2-IS/SS-PAK	154	M-532	159
M-502-07-10X	67, 115	M-502-39	68, 118	M-502C-11	166	M-508-DS-100X-PAK	148	M-525-2-NP1-ASL	156	M-532-CONC1	159
M-502-07N	67	M-502-39-10X	68, 118	M-502D	144	M-508-IS	122, 148, 207	M-525-2-NP1-ASL-PAK	156	M-532-CONC1-PAK	159
M-502-08	67, 115	M-502-39N	68	M-502D/E/F-SET	144	M-508-IS-10X	122, 148	M-525-2-NP2-ASL	156	M-532-CONC2	159
M-502-08-10X	67, 115	M-502-40	121	M-502E	144	M-508-IS-PAK	148, 207	M-525-2-NP2-ASL-PAK	156	M-532-CONC2-PAK	159
M-502-08N	67	M-502-40-10X	69	M-502F	144	M-508P-A	148, 155	M-525-2-PAK	153	M-532-PAK	159
M-502-09	67, 115	M-502-40N	69	M-502IS	144, 145, 152, 199	M-508P-A-PAK	148, 155	M-525-2-SET	154	M-532-SS	159
M-502-09-10X	67, 115	M-502-41	70, 122	M-502IS-2	144, 145, 152, 199	M-508P-B-R	148	M-525-2-SS	154, 157	M-532-SS-PAK	159
M-502-09N	67	M-502-41-10X	70, 122	M-502IS-2-3	69, 120, 144	M-508P-B-R2	148, 155	M-525-2-SS2-ASL	156	M-535-SET	159
M-502-10	67, 115	M-502-41N	70	M-502IS-2-PAK	144, 152	M-508P-B-R2-PAK	148, 155	M-525-2-SS2-ASL-PAK	156	M-547	160, 166
M-502-10-10X	67, 115	M-502-42	70, 123	M-502IS-ASL	142, 145, 199	M-508P-B-R-PAK	148	M-525-2-SS-PAK	154	M-547-02	160
M-502-10N	67	M-502-42-10X	70, 123	M-502IS-ASL-PAK	142	M-508P-C	148	M-525-2-SV-ASL	156	M-547-10X	160
M-502-10X	142, 203, 221	M-502-42N	70	M-502IS-PAK	144, 152	M-508P-C-PAK	148	M-525-2-SV-ASL-PAK	156	M-548.1-IS	114, 160
M-502-10X-PAK	142, 203, 221	M-502-43	70, 123	M-502IS-QC	145	M-508-SS	117, 148	M-525-2-TS	154	M-548.1-ME	119
M-502-10X-SET	142, 203	M-502-43-10X	70, 123	M-502IS/SS	142, 145	M-508-SS-2	117, 148	M-525-3	153	M-548A	160
M-502-11	67, 116	M-502-43N	70	M-502IS/SS-PAK	142	M-508-SS-2-PAK	148	M-525-3-5X	153	M-548B	160
M-502-11-10X	67, 116	M-502-44	70, 123	M-502-K1-SET	143	M-508-SS-PAK	148	M-525-3-5X-PAK	153	M-548-CAL	119, 160
M-502-11N	67	M-502-44-10X	70, 123	M-502-PAK	142, 203, 221	M-509	149, 166	M-525-3-PAK	153	M-548-IS	119, 160
M-502-12	67, 116	M-502-44N	70	M-502-R1	142	M-509-IS	149	M-525-4	153	M-549.1	160
M-502-12-10X	67, 116	M-502-46	70, 123	M-502-R1-PAK	142	M-509-PC	149	M-525-4-5X	153	M-550-IS	118, 160
M-502-13	67, 116	M-502-46-10X	70, 123	M-502-REG	166	M-509-RS-10ML	149	M-525-4-5X-PAK	153	M-550-QC	160
M-502-13-10X	67, 116	M-502-47	70, 124	M-502-REG-10X	166	M-509-SS	149	M-525-4-PAK	153	M-551-1A	161
M-502-13N	67	M-502-47-10X	70, 124	M-502-REG-10X-PAK	166	M-515.2-1	150	M-525-4-R-5X	155	M-551.1A-PAK	161
M-502-15N	68	M-502-47N	70	M-502-REG-PAK	166	M-515.2-1-PAK	150	M-525-5	123, 153, 166	M-551.1B	161
M-502-16	68, 116	M-502-48	70, 124	M-502-SET	142, 203	M-515.2-2	150	M-525-5-PAK	153	M-551.1B-PAK	161
M-502-16-10X	68, 116	M-502-48-10X	70, 124	M-503	146	M-515.2-2-PAK	150	M-525-FS-1	153	M-551.1C	161
M-502-16N	68	M-502-48N	70	M-503-PAK	146	M-515.2A-1	150	M-525-FS-1-PAK	153	M-551.1C-PAK	161
M-502-17	68, 117	M-502-49	70, 124	M-504	146, 166	M-515.2A-1-PAK	150	M-525-FS-2	123, 153	M-551.1-IS	67, 115, 161
M-502-17-10X	68, 117	M-502-50	70, 124	M-504.1-CSS	146	M-515.2A-2-PAK	150	M-525-FS-2-PAK	153	M-551.1-IS-100X	67, 161
M-502-17N	68	M-502-50-10X	70, 124	M-504.1-CSS-PAK	146	M-515.3A	151	M-525-IS	153	M-551.1-IS-100X-PAK	161
M-502-18	68, 117	M-502-50N	70	M-504.1-LFB	146	M-515.3A-PAK	151	M-525-IS-PAK	153	M-551.1-IS-PAK	161
M-502-18-10X	68, 117	M-502-51	70, 124	M-504.1-LFB-PAK	146	M-515.3-ICS	151	M-525-R-5X-SET	153	M-551.1-LPC	161
M-502-18N	68	M-502-51-10X	70, 124	M-504.1-MDL	146	M-515.3-ICS-PAK	151	M-525-REG-ASL	156, 167	M-551.1-LPC-P	161
M-502-19	68, 117	M-502-51N	70	M-504.1-MDL-PAK	146	M-515.3-LPC	151	M-525-REG-ASL-PAK	156, 167	M-551.1-LPC-PAK	161
M-502-19-10X	68, 117	M-502-52	70, 124	M-504.1-SET	146	M-515.3-LPC-PAK	151	M-525-REG-EA	156, 167	M-551.1-LPC-P-PAK	161
M-502-19N	68	M-502-52-10X	70, 124	M-504.1-SET-PAK	146	M-515.4	151	M-525-REG-EA-5X	156, 167	M-551.1-MLPC	161
M-502-20	68, 117	M-502-53	70, 124	M-505	146	M-515.4A	151	M-525-R-SET	153	M-551.1-MLPC-P	161
M-502-20-10X	68, 117	M-502-53-10X	70, 124	M-505R-2	146	M-515.4A-PAK	151	M-525-SET	153	M-551.1-MLPC-PAK	161
M-502-20N	68	M-502-53N	70	M-506	146	M-515.4-QCS	151	M-525-SS	122, 153	M-551.1-MLPC-P-PAK	161
M-502-21	68, 117	M-502-54	70, 124	M-506-PAK	146	M-515.4-QCS-PAK	151	M-525-SS-PAK	153	M-551.1-SS	, 20
M-502-21-10X	68, 117	M-502-54-10X	70, 124	M-506-QC							

Catalog Number Index

M-551B-7	70, 160	M-554-05	71, 117	M-609-10X-SET	214	M-625-16-10X	73, 119	M-680-RT	15, 180	M-1667A-DNPH	191
M-551B-8	72, 124, 160	M-554-06	72, 119	M-609A-10X	214	M-625-17	74, 122, 177	M-680-RT-PAK	15, 180	M-1667A-DNPH-01	72, 191
M-551B-SET	160	M-554-07	72, 120	M-609A-R	173	M-625-18	74, 122, 177	M-680-SET	15, 180	M-1667A-DNPH-02	72, 191
M-552.1	162	M-554-08	72, 120	M-609B-10X	214	M-625-18-10X	74, 122	M-680-TS	15, 117, 180	M-1667A-DNPH-03	72, 191
M-552.1-01	117, 162	M-554-09	72, 122	M-609B-R	173	M-625-19	74, 124, 177	M-680-TS-PAK	15, 180	M-1667A-DNPH-PAK	191
M-552.1-02	77, 120, 162	M-554-10	72, 122	M-609-QC	173, 214	M-625-20	73, 116, 177	M-1004	255, 312	M-1667A-DNPH-SET	191
M-552.1-03	77, 120, 162	M-554-11	72, 122	M-609-R-SET	173	M-625A	177	M-1004-10X	255, 312	M-1667A-M	191
M-552.1-04	77, 162	M-554-12	72, 122	M-610	173	M-625A-PAK	177	M-1600-GPC-5ML	186, 188	M-1667A-M-PAK	191
M-552.1-05	77, 120, 162	M-554-DNPH	164	M-610A	173	M-625-BN	176	M-1600-SPE	74, 186, 188	M-1668A-0.01X-SET	192, 7
M-552.1-06	77, 120, 162	M-554-DNPH-01	71, 114	M-610-MS	173, 236, 255	M-625-BN-1	176	M-1613-CAL-SET	22, 183	M-1668A-1-0.01X	7
M-552.1-07	77, 121, 162	M-554-DNPH-02	71, 115	M-610-MS-PAK	173, 236, 255	M-625-BN-1-PAK	176	M-1613-DF	183, 22	M-1668A-2-0.01X	7
M-552.1A	162	M-554-DNPH-03	71, 116	M-610-QC	173, 236	M-625-BN-2	176	M-1613-PAR	183, 22	M-1668A-3-0.01X	7
M-552.1A-SET	162	M-554-DNPH-04	72	M-610-QC-FL	236, 255	M-625-BN-2-PAK	176	M-1613-PAR-PAK	183, 22	M-1668A-4-0.01X	8
M-552.1-IS	162	M-554-DNPH-05	71, 117	M-610-QC-FL-PAK	236, 255	M-625-BN-3	176	M-1618-1	185	M-1668A-5-0.01X	8
M-552.1-IS-PAK	162	M-554-DNPH-06	72, 119	M-611	173	M-625-BN-3-PAK	176	M-1618-1-PAK	185	M-1668A-C-NT-LOC-WD	193, 8
M-552.1-SET	162	M-554-DNPH-07	72, 120	M-612	173	M-625-BN-4	176	M-1618-2	185	M-1668A-C-NT-LOC-WD-PAK	8
M-552.1-SS	115, 162	M-554-DNPH-08	72, 120	M-613	21	M-625-BN-4-PAK	176	M-1618-3	185	M-1668A-LOC-SET	193, 8
M-552.1-SS-ME	69, 120, 162	M-554-DNPH-09	72, 122	M-613-PAK	173	M-625-BN-5X	176	M-1618-4	185	M-1668A-QC	193
M-552.1-SS-ME-PAK	162	M-554-DNPH-10	72, 122	M-614	173	M-625-BN-5X-PAK	176	M-1618D	185, 207	M-1668A-QC-PAK	193
M-552.1-SS-PAK	162	M-554-DNPH-11	72, 122	M-614.1	173	M-625-BN-PAK	176	M-1618D-PAK	185, 207	M-1671A-IS	70, 123, 194
M-552.2	163	M-554-DNPH-12	72, 122	M-614.1-ASL	173	M-625C-1	75, 115, 177	M-1618-GP-5ML	185, 189	M-1671A-IS-PAK	194
M-552.2-01	163	M-554-DNPH-SET	164	M-615A-ASL	174	M-625C-140X	75, 230	M-1618-SA	77, 185	M-1673	71, 194
M-552.2-02	77, 163	M-554-R1	164	M-615A-ASL-PAK	174	M-625C-2	74, 122, 177	M-1618-SE	74, 185	M-1673-DERV-5ML	194
M-552.2-03	77, 163	M-555A	164	M-615-ASL	174	M-625C-2-10X	74	M-1618-SE-PAK	185	M-1673-PAK	194
M-552.2-04	77, 120, 163	M-555B	164	M-615-ASL-PAK	174	M-625C-3	117, 177, 230	M-1618-SP	185	M-1673-SS	194
M-552.2-05	77, 163	M-556-DER-10ML	164	M-617-2	174	M-625C-3-2X	135	M-1618-SS	117, 185	M-1673-SS-PAK	194
M-552.2-06	77, 120, 163	M-556-DER-10ML-PAK	164	M-618	174	M-625C-3-PAK	230	M-1618-SS-PAK	185	M-8010-01	67, 115
M-552.2-07	77, 120, 163	M-556-IS	68, 117, 164	M-618-IS	174	M-625C-4	177	M-1626	261	M-8010A	200, 201
M-552.2-08	77, 120, 163	M-556-IS-PAK	164	M-619-01	174	M-625C-5	177	M-1626-01S	73, 90, 261	M-8010B	201
M-552.2-09	77, 121, 163	M-556-IS-WL-5ML-VAP	164	M-619-02	174	M-625C-SET	131, 179	M-1626-IS	261	M-8010-IS/SS 145, 199, 200, 201	
M-552.2-10	77, 121, 163	M-556-MIXA	164	M-619-03	174	M-625-MOD	176	M-1626-S	261	M-8010-IS/SS-PAK	200, 201
M-552.2A	163	M-556-MIXB	164	M-619-04	122, 174	M-625-MOD-PAK	176	M-1626-SS	261	M-8010R-1	200
M-552.2A-01	77, 115, 163	M-556-SS	72, 124, 164	M-619-05	122, 174	M-625P	177	M-1653A	186	M-8010R-1-04	67, 116
M-552.2A-02	77, 115, 163	M-556-SS-100X	72, 164	M-619-06	122, 174	M-625P-PAK	177	M-1653A-D-R2-SET	186	M-8010R-1-04-10X	67, 116
M-552.2A-03	77, 116, 163	M-556-SS-100X-PAK	164	M-619-07	123, 174	M-625-TS	131, 177, 179, 230	M-1653A-D-R-SET	186	M-8015A	202
M-552.2A-04	116, 163	M-556-SS-PAK	164	M-619-08	123, 174	M-625-TS-20X	177, 226	M-1653A-PAK	186	M-8015A-10X	202
M-552.2A-05	77, 117, 163	M-601-10X-SET	170, 200	M-619-09	174	M-625-TS-20X-PAK	177	M-1653A-R	186	M-8015-ASL	202
M-552.2A-06	77, 117, 163	M-601/602	171	M-619-10	123, 174	M-625-TS-PAK 131, 177, 179, 230		M-1653B	186	M-8015B/5031-01	72, 114, 202
M-552.2A-07	77, 121, 163	M-601/602/BTEX	171	M-619-11	174	M-627	179	M-1653B-R	186	M-8015B/5031-02	67, 202
M-552.2A-08	77, 121, 163	M-601/602/BTEX-10X	171	M-619M	174	M-627-R	179	M-1653C	186	M-8015B/5031-03	71, 202
M-552.2A-09	77, 123, 163	M-601/602-PAK	171	M-619-SET	174	M-629	116, 180	M-1653C-R	186	M-8015B/5031-04	67, 202
M-552.2A-10	77, 124, 163	M-601A	170, 200	M-620	75, 118, 174	M-630-1-0.1X	124	M-1653D-AC	186	M-8015B/5031-05	71, 114, 202
M-552.2A-R1	163	M-601A-10X	170, 200	M-622.1	175	M-631	115, 180	M-1653D-R	186	M-8015B/5031-06	71, 115, 202
M-552.2A-SET	163	M-601A-10X-PAK	170	M-622-06	117	M-632-01	114, 179	M-1653-IS	186, 20	M-8015B/5031-07	71, 115, 202
M-552.2-IS	163	M-601A-PAK	170, 200	M-622-1S	122	M-632-1.1	124, 179	M-1653-IS-R	186, 20	M-8015B/5031-08	71, 202
M-552.2-LPC	163	M-601-ASL	170	M-622-SET	174	M-632-1.2	122, 179	M-1653-IS	74, 124, 186	M-8015B/5031-09	77, 118, 202
M-552.2-LPC-PAK	163	M-601-ASL-PAK	170	M-624	175	M-632-1.3	121, 179	M-1653-IS-R	74, 124, 186	M-8015B/5031-10	77, 202
M-552.2-LPC-WL-25ML	163	M-601B	128, 171	M-624-SS-01	67, 115, 175	M-632-1.4	179	M-1653-TS	117, 186, 189	M-8015B/5031-11	71, 119, 202, 312, 322
M-552.2-R1	163	M-601B-PAK	128, 171	M-624-SS-01-10X	67, 115	M-632-1-SET	179	M-1656-01-CAL-SET	187	M-8015B/5031-12	69, 119, 202
M-552.2-SET	163	M-601C	116, 170, 171, 200	M-624-SS-02	175	M-632-02	114, 179	M-1656-02-CAL-SET	187	M-8015B/5031-13	71, 119, 202
M-552.2-SS	117, 163	M-601C-10X	77, 170, 171, 200	M-624-SS-03	67, 115, 175	M-632-03	179	M-1656-03-CAL-SET	187	M-8015B/5031-14-R1	69, 119, 202, 222
M-552.2-SS2	163	M-601C-10X-PAK	170, 171	M-624-SS-03-10X	67, 152	M-632-04	179	M-1656-04-CAL-SET	187	M-8015B/5031-15	71, 120, 202
M-552.2-SS-ME	69, 120, 163	M-601-CHG	171	M-624-SS-04	67, 115, 175	M-632-05	116, 179	M-1656-05-CAL-SET	187	M-8015B/5031-16	71, 120, 202
M-552.3	163	M-601-CHG-PAK	171	M-624-SS-05	68, 117, 175	M-632-06	120, 179	M-1656-06-CAL-SET	187	M-8015B/5031-17	71, 120, 202, 312, 322
M-552.3A-R1	163	M-601C-PAK	170, 171, 200	M-624-SS-06	68, 118, 175	M-632-07	119, 179	M-1656-07-CAL-SET	187	M-8015B/5031-18	72, 121, 202
M-552.3-R1	163	M-601-SET	170, 200	M-624-SS-06-10X	68, 118	M-632-08	119, 179	M-1656-CAL-SET	187	M-8015B/5031-19	71, 120, 202, 312, 322
M-552A-1	77, 115	M-602	171	M-624-SS-07	69, 118, 175	M-632-09	119, 179	M-1656-DS	186	M-8015B/5031-20	76, 121, 202
M-552A-2	77, 116	M-602-GAS	171	M-624-SS-07-10X	69, 118	M-632-10	120, 179	M-1657-01-R1-CAL-SET	188	M-8015B/5031-21	72, 122, 202
M-552A-3	77, 117	M-602-GAS-10X	171, 312, 322	M-624-SS-08	69, 119, 175	M-632-11	179	M-1657-02-CAL-SET	188	M-8015B/5031-22	72, 122, 202
M-552A-4	124	M-602-GAS-10X-PAK	171	M-624-SS-09	69, 175	M-632-12	121, 179	M-1657-03-CAL-SET	188	M-8015B/5031-23	122, 202
M-552A-5	77, 117	M-602-GAS-PAK	171	M-624-SS-10	69, 122, 175	M-632-13	121, 179	M-1657-04-CAL-SET	188	M-8015B/5031-24	71, 122, 202
M-552A-6	118	M-602-PAK	171	M-624-SS-11	68, 117, 175	M-632-14	121, 179	M-1657-CAL-SET	188	M-8015B/5031-25	69, 122, 202
M-552A-7	74	M-602-SS	124, 146, 171	M-624-SS-11-10X	68, 117	M-632-15	121, 179	M-1658-CAL-SET	189	M-8015B/5031-26	71, 122, 202
M-552A-R	162	M-602-SS-10X	124	M-624-SS-12	67, 115, 175	M-632-16	121, 179	M-1659-CAL-1X	189	M-8015B/5031-27	76, 123, 202
M-552A-R-01	162	M-602-SS-100X	171	M-624-SS-13	67, 116, 175	M-632-17	179	M-1659-CAL-SET	189	M-8015B/5031-28	202
M-552A-R-02	77, 115, 162	M-602-SS-PAK	146, 171	M-624-SS-14	70, 124, 175	M-632-18	122, 179	M-1659-MS	117, 189	M-8020	202
M-552A-R-03	162	M-603	168, 172, 221, 222	M-624-SS-M	145, 175, 199	M-632-19	179	M-1664-5ML	324, 341	M-8020-10X	202
M-552A-R-04	162	M-603-10X	172, 204, 221	M-624-SS-M-PAK	175	M-632-20	123, 179	M-1664-5ML-PAK	324, 341	M-8020-10X-PAK	202
M-552A-R-05	162	M-603-M-0.1X	172, 221	M-625-01	74, 114, 177	M-632-21	123, 179	M-1664-20ML	324, 341	M-8020B-R1	202
M-552A-R-06	73, 162	M-603-M-5X	172, 221	M-625-01-10X	74, 114	M-632M	179	M-1664-20ML-PAK	324, 341	M-8020B-R1-PAK	202
M-552A-R-07	162	M-603-PAK	172, 221	M-625-02	114, 177	M-632M-10X	179	M-1665	189	M-8020-IS	145, 199, 202
M-552A-R-08	124, 162	M-604	172	M-625-03	115, 177	M-632M-SET	179	M-1665-LAB	189	M-8020-IS-10X	202
M-552A-R-SET	162	M-604.1	172, 180	M-625-03-10X	115	M-633	179	M-1665-SET	189	M-8020-IS-10X-PAK	202
M-552-IS	68, 117, 162	M-604-PAK	172	M-625-04	20, 117, 118	M-634	179	M-1666A-DI-LAB	190	M-8020-IS-PAK	202
M-552-IS-PAK	162	M-604-PFB	172	M-625-04-10X	20, 117	M-634-IS	115, 179	M-1666A-DI-R1	190	M-8020-IS/SS-ASL 145, 199, 202	
M-552-R	162	M-604-PFB-PAK	172	M-625-05	20, 117, 118	M-635	123, 180	M-1666A-DI-R1-SET	190	M-8020-IS-SS	202
M-552-R-01	162	M-604-SS	74, 124, 172	M-625-05-10X	20, 117	M-636	115	M-1666A-DI-R-ADD1	75, 190	M-8020-QC	121, 202
M-552-R-02	162	M-604-SS-PAK	172	M-625-06	20, 117, 118	M-638	122, 180	M-1666A-DI-R-ADD2	72, 190	M-8020-QC-PAK	202
M-552-R-03	77, 120, 162	M-604-SS-PFB	124, 172	M-625-06-10X	20, 117	M-639	114	M-1666A-LAB	190	M-8020-SS	145, 199
M-552-R-04	77, 162	M-604-SS-PFB-PAK	172								

Catalog Number Index

M-8021B-NAV	203	M-8080A-ASL	207	M-8100-SS	215	M-8150-08	77, 118, 174, 219	M-8260B-04	222	M-8310-FL-05	236, 255
M-8021B-NAV-PAK	203	M-8080A-ASL-PAK	207	M-8100-SS-PAK	215	M-8150-09	120, 174, 219	M-8260B-04-PAK	222	M-8310-FL-06	236, 255
M-8021B-SS	204	M-8080-CAL-SET	208	M-8111	216	M-8150-10	120, 219	M-8260B-06-PAK	222	M-8310-FL-07	236, 255
M-8021B-SS-10X	204	M-8080-OP	207	M-8111-IS-20X	216, 20	M-8150/51-CAL-SET	218	M-8260-IS	145, 199, 223	M-8310-FL-08	115, 236, 255
M-8021B-SS-10X-PAK	204	M-8080-OP-PAK	207	M-8111-IS-20X-PAK	216	M-8150/51-LPC-SML	150, 218	M-8260-IS-10X	223	M-8310-FL-09	116, 236, 255
M-8021B-SS-100X	204	M-8080-PAK	207	M-8111-PAK	216	M-8150/51-MS-WL-10ML	218	M-8260-IS-10X-PAK	223	M-8310-FL-10	117, 236, 255
M-8021B-SS-100X-PAK	204	M-8080-QC-R	207	M-8111-SS-50X	216	M-8150/51-MS-WL-25ML	218	M-8260-IS-PAK	223	M-8310-FL-11	119, 236, 255
M-8021B-SS-PAK	204	M-8080-QC-R-PAK	207	M-8111-X1	216	M-8150/51-MS-WL-50ML	218	M-8260-IS-R	145, 199, 223	M-8310-FL-12	119, 236, 255
M-8021B-X1	201, 203	M-8080-R2-CAL-SET	208	M-8120	216	M-8150/51-SS-WL-25ML	218	M-8260-IS-R-10X	223	M-8310-FL-13	120, 236, 255
M-8021B-X2	201, 203	M-8080-R2-WL-5X-10ML	208	M-8120-01	116, 216	M-8150/51-SS-WL-50ML	218	M-8260-IS-R-10X-PAK	223	M-8310-FL-14	121, 236, 255
M-8021-SS	145, 199, 204	M-8080-R2-WL-5X-25ML	208	M-8120-02	68, 216	M-8150/51-WL	218	M-8260-IS-R-PAK	223	M-8310-FL-15	121, 236, 255
M-8021-SS-M	145, 199, 204	M-8080-R2-WL-5X-50ML	208	M-8120-03	68, 216	M-8150/51-WL-2X	218	M-8260-SS	223	M-8310-FL-16	121, 236, 255
M-8021-SS-M-PAK	204	M-8080-R2-WL-10X-10ML	208	M-8120-04	68, 216	M-8150/51-WL-4X	218	M-8260-SS-2	68, 117, 223	M-8310-FL-17	236, 255
M-8021-SS-PAK	204	M-8080-R2-WL-10X-25ML	208	M-8120-05	69, 120, 216	M-8150/51-WL-4X-10ML	218	M-8260-SS-2-10X	68, 117, 223	M-8310-FL-18	122, 236, 255
M-8032	67, 114, 166, 204	M-8080-R2-WL-10X-50ML	208	M-8120-06	69, 216	M-8150/51-WL-4X-25ML	218	M-8260-SS-10X	223	M-8310-FL-PAK	236, 255
M-8032B	204	M-8080-R2-WL-25X-10ML	208	M-8120-07	69, 120, 216	M-8150/51-WL-4X-50ML	218	M-8260-SS-10X-PAK	223	M-8310-FL-SET	236, 255
M-8032B-PAK	204	M-8080-R2-WL-25X-25ML	208	M-8120-08	69, 120, 216	M-8150/51-WL-10X	218	M-8260-SS-PAK	223	M-8310-PAK	236
M-8032-IS	78	M-8080-R2-WL-25X-50ML	208	M-8120-09	70, 123, 216	M-8150/51-WL-10X-10ML	218	M-8270-01	227	M-8310-QC-ATI	236, 255
M-8032-IS-PAK	204	M-8080-VL-5X-10ML	208	M-8120-10	216	M-8150/51-WL-10X-25ML	218	M-8270-01-ASL	231	M-8310-QC-ATI-PAK	236, 255
M-8032-PAK	204	M-8080-VL-5X-25ML	208	M-8120-QC	216	M-8150/51-WL-10X-50ML	218	M-8270-02	227	M-8310-SFE-IS-100X	236
M-8033	67, 204	M-8080-VL-5X-50ML	208	M-8121	216	M-8150/51-WL-25X	218	M-8270-02-ASL	231	M-8310-SFE-IS-100X-PAK	236
M-8033-PAK	204	M-8080-WL-10X-10ML	208	M-8121-IS	70, 124, 216	M-8150/51-WL-25X-10ML	218	M-8270-03	227	M-8310-SS	236, 20
M-8040-01	73	M-8080-WL-10X-25ML	208	M-8121-IS-M	216	M-8150/51-WL-25X-25ML	218	M-8270-03-ASL	206, 231	M-8310-SS-PAK	236
M-8040-02	73	M-8080-WL-10X-50ML	208	M-8121-IS-M-PAK	216	M-8150/51-WL-25X-50ML	218	M-8270-04A	227	M-8315	237
M-8040-03	73	M-8080-WL-25X-10ML	208	M-8121-IS-PAK	216	M-8150/51-WL-25X-35X	218	M-8270-04-ASL	231	M-8315-01	71, 114, 237
M-8040-04	73	M-8080-WL-25X-25ML	208	M-8121-QC	216	M-8150/51-WL-50X	218	M-8270-04B	227	M-8315-02	72, 119, 237
M-8040-05	73	M-8080-WL-25X-50ML	208	M-8121-SS	216	M-8150A	174, 219	M-8270-04B-R1	227	M-8315-DNPH-10ML	237
M-8040-06	73	M-8081A-SC	211	M-8121-SS-PAK	216	M-8150A-PAK	219	M-8270-05	227	M-8315-PAK	237
M-8040-07	73, 118	M-8081A-SC-PAK	211	M-8131	216	M-8150A-SET	174, 219	M-8270-05-ASL	231	M-8315-R1	237
M-8040-08	73, 118	M-8081A-SC-R	211	M-8140-01	114	M-8150B-SS	118, 151, 219, 220	M-8270-06	227	M-8315-R1-DNPH	237
M-8040-09	73, 118	M-8081A-SC-R-PAK	211	M-8140-02	115	M-8150B-SS-10X	118, 219, 220	M-8270-06-ASL	231	M-8315-R2	237
M-8040-10	73	M-8081-DC	211	M-8140-03	116	M-8150B-SS-PAK	151, 219, 220	M-8270-07	225, 227, 234	M-8315-R2-DNPH	237
M-8040-11	118	M-8081-DS	211	M-8140-04	116	M-8150M	185, 219	M-8270-07-ASL	231	M-8315-R2-DNPH-02	72, 114
M-8040-12	73	M-8081-DS-PAK	211	M-8140-07	118	M-8150M-2	185, 219	M-8270-08	225, 227	M-8315-R3-10X-SET	237
M-8040-13	73	M-8081-IS	211	M-8140-08	118	M-8150M-2-PAK	185, 219	M-8270-08-ASL	231	M-8315-R-DNPH-01	71, 114
M-8040-14	73	M-8081-IS-DC	67, 115, 211	M-8140-09	119	M-8150M-A	219	M-8270-09	225, 227	M-8315-R-DNPH-03	71, 114
M-8040-15	74, 122	M-8081-IS-DC-PAK	211	M-8140-10	119	M-8150M-A-PAK	219	M-8270-09-ASL	231	M-8315-R-DNPH-03-10X	114
M-8040-16	122	M-8081-IS-PAK	211	M-8140-11	119	M-8150M-PAK	185, 219	M-8270-10	70, 228	M-8315-R-DNPH-04	71, 115
M-8040-17	74	M-8081-IS-X	68, 117, 211	M-8140-12	120	M-8150S-A-01	116, 174, 219	M-8270-10-ASL	231	M-8315-R-DNPH-05	71, 115
M-8040-18	74, 124	M-8081-IS-X-PAK	211	M-8140-14	121	M-8150S-A-02	117, 174, 219	M-8270-10-R	228	M-8315-R-DNPH-06	71, 116
M-8040-19	74, 124	M-8081-SC	211	M-8140-15	121	M-8150S-A-03	174, 219	M-8270-11-ASL	231	M-8315-R-DNPH-07	72, 116
M-8040A-ASL	205	M-8081-SC-PAK	211	M-8140-16	122	M-8150S-A-04	123, 174, 219	M-8270-12-ASL	232	M-8315-R-DNPH-08	71, 117
M-8040A-ASL-20X	205	M-8081-SS-DC	116, 211	M-8140-17	123	M-8150S-A-05	116, 174, 219	M-8270-13A-R	234	M-8315-R-DNPH-09	71, 118
M-8040A-ASL-PAK	205	M-8081-SS-DC-PAK	211	M-8140-18	123	M-8150S-A-06	117, 174, 219	M-8270-13A-R2	232	M-8315-R-DNPH-10	72, 119
M-8040A-R	205	M-8081-SS-X	34, 115, 211	M-8140-19	123	M-8150S-A-07	118, 174, 219	M-8270-13-ASL	232	M-8315-R-DNPH-11	72, 120
M-8040A-R-PAK	205	M-8081-SS-X-PAK	211	M-8140-20	124	M-8150S-A-08	174, 219	M-8270-13B-R	228, 232, 234	M-8315-R-DNPH-12	72, 120
M-8040A-R-PFB	205	M-8081-T	211	M-8140M	217	M-8150S-A-09	120, 174, 219	M-8270-13-SET	228	M-8315-R-DNPH-13	72, 120
M-8040A-R-PFB-PAK	205	M-8081-T-R	211	M-8140M-5X	217	M-8150S-A-10	120, 174, 219	M-8270-14A	228	M-8315-R-DNPH-14	72, 122
M-8040B-R	205	M-8082	212	M-8140M-5X-PAK	217	M-8150-SET	174, 219	M-8270-14A-R1	232, 234	M-8315-R-DNPH-15	72, 122
M-8040B-R-PAK	205	M-8082A	212	M-8140M-PAK	217	M-8151	220	M-8270-14-ASL	232	M-8315-R-DNPH-16	72, 122
M-8040B-R-PFB	205	M-8082A-PAK	212	M-8140-SET	217	M-8151A	220	M-8270-14B	228, 232, 234	M-8315-R-DNPH-17	72, 122
M-8040B-R-PFB-PAK	205	M-8082-ISC-WL-10ML	212	M-8141-01	118, 217	M-8151A-PAK	220	M-8270-14C	228, 232, 234	M-8315-R-DNPH-18	72, 123
M-8040-PFB-SET	205	M-8082-ISC-WL-10ML-PAK	212	M-8141-02	119, 217	M-8151-IS	218, 219, 220	M-8270-14-SET	228	M-8315-R-DNPH-19	72, 123
M-8040-SET	205	M-8082-PAK	212	M-8141-03	120, 217	M-8151-IS-2	68, 218, 220	M-8270-15	228, 232, 234	M-8315-R-DNPH-20	72, 123
M-8040-SS	205	M-8082-SS	70, 123, 212	M-8141-04	121, 217	M-8151-IS-2-PAK	218, 220	M-8270-16	228, 232, 234	M-8315-R-DNPH-SET	237
M-8040-SS-PAK	205	M-8082-SS-10X	70, 123, 212	M-8141-05	217	M-8151-IS-PAK	218, 219, 220	M-8270-17	228, 232, 234	M-8316	237
M-8040-SS-PFB	205	M-8082-SSA-WL-10ML	212	M-8141-06	123, 217	M-8240/60-IS	145, 199, 224	M-8270-18	228, 232, 234	M-8318-05	118
M-8040-SS-PFB-PAK	205	M-8082-SSA-WL-10ML-PAK	212	M-8141-07	123, 217	M-8240/60-IS-10X	224	M-8270-19	228, 233, 234	M-8318-06	120
M-8041	206	M-8082-SSC-WL-10ML	212	M-8141A-1-01	114	M-8240/60-IS-10X-PAK	224	M-8270-20	228, 233, 234	M-8318-07	120
M-8041-IS	206	M-8082-SSC-WL-10ML-PAK	212	M-8141A-1-02	115	M-8240/60-IS-PAK	224	M-8270-21	233	M-8318-09	122
M-8041-IS-10X	206	M-8085-C1	213	M-8141A-1-03	116	M-8240/60-IS/SS	145, 199, 224	M-8270-22	233, 234	M-8318M	237
M-8041-IS-10X-PAK	206	M-8085-C2	213	M-8141A-1-04	118	M-8240/60-IS/SS-10X	224	M-8270-23-R1	234	M-8318-SET	237
M-8041-IS-20X	206	M-8085-C1C	214	M-8141A-1-05	119	M-8240/60-IS/SS-10XPAK	224	M-8270-24	234	M-8321-HERB	238
M-8041-IS-20X-PAK	206	M-8085-H1-M	213	M-8141A-1-06	119	M-8240/60-IS-SS-PAK	224	M-8270-AG01-ASL	233	M-8321-OP	238
M-8041-IS-PAK	206	M-8085-H2-M	213	M-8141A-1-07	120	M-8240/60-SS	145, 199, 224	M-8270-AG02-ASL	233	M-8330-01	118, 82
M-8041-PAK	206	M-8085-HERB-SS	74, 214	M-8141A-1-08	120	M-8240/60-SS-10X	224	M-8270-ASL-SET	231	M-8330-01-0.1X118, 239, 82, 239	
M-8041-SS	73, 206	M-8085-N1	213	M-8141A-1-09	122	M-8240/60-SS-10X-PAK	224	M-8270-CAL-IS-SET	229	M-8330-02	82, 118
M-8041-SS-10X	73, 206	M-8085-N2	213	M-8141A-1-10	123	M-8240/60-SS-SS-PAK	224	M-8270-CAL-SET	229	M-8330-02-0.1X	82, 118, 239
M-8041-SS-10X-PAK	206	M-8085-N3	213	M-8141A-1M	217	M-8240A	197, 220	M-8270-IS-WL-2.5X-5ML	229	M-8330-03	82, 118
M-8041-SS-100X	73, 206	M-8085-P1	213	M-8141A-1-SET	217	M-8240C	197, 221	M-8270-IS-WL-2.5X-10ML	229	M-8330-03-0.1X	82, 118, 239
M-8041-SS-100X-PAK	206	M-8085-P2	213	M-8141A-2M	217	M-8240C-R3	221	M-8270-R-SET	227	M-8330-04	82, 120
M-8041-SS-625X	73, 206	M-8085-PEST-SS	213	M-8141A-2-SET	217	M-8240C-R3-10X	221, 222	M-8270-SET	227	M-8330-04-0.1X	82, 118, 239
M-8041-SS-625X-PAK	206	M-8085-PEST-SS2	214	M-8141A-IC	217	M-8240C-R6	221	M-8270-SS	226	M-8330-05	123, 83
M-8041-SS-PAK	206	M-8090-10X	214	M-8141A-IS	217	M-8260/5031-IS-FID	202	M-8270-SS-PAK	226	M-8330-05-0.1X	83, 118, 239
M-8041-X1	206	M-8090-10X-SET	214	M-8141A-IS-PAK	217	M-8260A/B-IS	145, 223	M-8270-SS-R	226, 230	M-8330-06	82, 121
M-8041-X1-PAK	206	M-8090-QC	214	M-8141A-SS	217	M-8260A/B-IS-10X	223	M-8270-SS-R-PAK	226, 230	M-8330-06-0.1X	82, 121, 239
M-8060	206	M-8091	214	M-8141A-SS-01	124	M-8260A/B-IS-10X-PAK	223	M-8270-SS-R-WL-PAK	230	M-8330-07	82, 121
M-8060-PAK	206	M-8091-IS-20X	69, 120, 214	M-8141A-SS-PAK	217	M-8260A/B-IS-PAK	223	M-8270-SS-R-WL-VAP	230	M-8330-07-0.1X	82, 121, 239
M-8060-QC	206	M-8091-IS-20X-PAK	214	M-8141A-SS-X	217	M-8260A/B-IS/SS	145, 199, 223				

Catalog Number Index

M-8330-ADD-1-10X	82, 239	MCS-06R-1	356	M-GRA-RES-PAK 291, 292, 293	32	MOBDE-5010S	32	M-REF-05	108	ODOR-11N	107
M-8330-ADD-2	122, 83, 239	MCS-06R-5	356	M-GRA-SCS-AS	283, 307	MOBDE-5011S	32	M-REF-06	116, 108	ODOR-12N	107
M-8330-ADD-2-10X	83, 239	MCS-1996-1-SET	356	M-GRA-SCS-AS-PAK	283	MOBDE-6001S-0.2X	32	M-REF-07	116, 108	ODOR-13N	107
M-8330-ADD-3	122, 83, 239	MCS-1996-5-SET	356	M-GRA-ST	69, 288, 289, 291, 292, 293	MOBDE-6002S-0.2X	32	M-REF-08	108	ODOR-14N	107
M-8330-ADD-4	118, 82, 239	MDA-HERB-01	256	M-GRA-ST-PAK	288, 289, 291, 292, 293	MOBDE-6003S-0.2X	32	M-REF-09	118, 108	ODOR-15S-10ML	107
M-8330-ADD-5	119, 82, 239	MDA-PEST-01-R1	256			MOBDE-6004S-0.2X	32	M-REF-10	118, 108	ODOR-16S-10ML	107
M-8330-ADD-6	121, 82, 239	MDA-PEST-01-R1-PAK	256			MOBDE-6005S	32	M-REF-11	118, 108	ODOR-17S-10ML	107
M-8330-ADD-7	121, 82, 239	M-DEUT/IS/SS	199	M-GRA-VT-AS-10ML	283	MOBDE-6005S-0.2X	32	M-REF-12	123, 108	ODOR-JDWOS	107
M-8330-ADD-8	120, 82, 239	M-E-1179-M	67, 222	M-GRA-VT-AS-10ML-PAK	283	MOBDE-7001S	32	M-REF-13	108	ODOR-STM-SET	107
M-8330-ADD-9	82, 239	MES-01-1	359	M-GRA-VT/IS-AS	283	MOBDE-7002S	32	M-REF-14	124, 108	OGAD-001	312, 322
M-8330-ADD-10	119, 82, 239	MES-01-5	359	M-GRA-VT/IS-AS-PAK	283	MOBDE-7003S	32	M-REF-14-10X	124, 108	OGAD-001-PAK	312, 322
M-8330-ADD-11	122, 83, 239	MES-02-1	359	M-GRO-BLNK/IS-10ML	285	MOBDE-7004S-0.2X	32	M-REF-15	124, 108	OMT-001	238
M-8330-ADD-12	117, 82, 239	MES-02-5	359	M-GRO-BLNK/IS-10ML-PAK	285	MOBDE-8001S	32	M-REF-SET	108	OMT-001-PAK	238
M-8330-ADD-13	82, 239	MES-03-1	359	M-GRO-CAL-EPA-10ML-SET286		MOCBDE-4001S	32	M-REF-X	108	OMT-002	238
M-8330-ADD-14-DMF	83, 239	MES-03-5	359	M-GRO-CAL/IS/EPA-SET	286	MOCBDE-4001S-0.5X	32	M-REF-X-01	115, 108	OMT-002-PAK	238
M-8330-ADD-15	239, 83	MES-04-1	359	M-GRO-CAL/IS-R1-SET	284	MOCBDE-4002S	32	M-REF-X-02	116, 108	OMT-003	238
M-8330-ADD-17	239, 83	MES-04-5	359	M-GRO-CAL/IS-SET	284	MOCBDE-4002S-0.5X	32	M-REF-X-03	117, 108	OMT-003-PAK	238
M-8330-ADD-18	82, 239	MES-05-1-SET	359	M-GRO-CAL/IS-SET-PAK	284	MOCBDE-4003S	32	M-REF-X-04	118, 108	OMT-004	238
M-8330-ADD-19	239, 83	MES-05-5-SET	359	M-GRO-CAL-SET	284	MOCBDE-4003S-0.5X	32	M-REF-X-05	118, 108	OMT-004-PAK	238
M-8330-ADD-20	82, 239	MES-06-1-SET	359	M-GRO-EPA-CC-10ML	286	MO-COMP-D-40X	308	M-REF-X-06	122, 108	OMT-005	238
M-8330-ADD-21	118, 82, 239	MES-06-5-SET	359	M-GRO-EPA-CC-10ML-PAK	286	MOD-02-0.5	334	M-REF-X-07	123, 108	OMT-005-PAK	238
M-8330-ADD-22	122, 83, 239	MES-07-1	359	M-GRO-EPACC/IS-5ML	286	MOD-02-1	334	M-REF-X-08	124, 108	OMT-006	238
M-8330-ADD-23N-5MG	83, 239	MES-07-5	359	M-GRO-EPACC/IS-5ML-PAK286		MOD-02-5	334	M-REF-X-09	108	OMT-006-PAK	238
M-8330-ADD-24	83, 239	MES-09-1-SET	359	M-GRO-EPA-SP-5ML	286	MOD-03-0.5	334	M-REF-X-R1-SET	108		
M-8330-ADD-25	82, 239	MES-09-5-SET	359	M-GRO-EPA-SP-5ML-PAK	286	MOD-03-1	334	MSCB-3049	18		
M-8330-ADD-26	82, 239	MES-10-1	359	M-GRO-IS-5ML	277, 285, 286	MOD-03-5	334	MSCB-3052	18		
M-8330-ADD-27	82, 239	MES-10-5	359	M-GRO-IS-5ML-PAK277, 285, 286		MOD-04-0.5	334	MSCB-3070	18		
M-8330-ADD-28	83, 239	MES-11-1-SET	359	M-GRO-QC-10ML	285	MOD-04-1	334	MSCB-3087	18	P-001N	47
M-8330-ADD-29	83, 239	MES-11-5-SET	359	M-GRO-QC-10ML-PAK	285	MOD-04-5	334	MSCB-3091	18	P-001S	47
M-8330-ADD-31	82, 239	MES-12-1-SET	360	M-GRO-QC/IS-5ML	285	MOD-05-0.5	334	MSCB-3095	18	P-002N	47
M-8330-ADD-32	82, 239	MES-12-5-SET	360	M-GRO-QC/IS-5ML-PAK	285	MOD-05-1	334	MSCB-3101	18	P-002S	47, 114
M-8330-ADD-33	82, 239	MES-13-1-SET	360	M-GRO-QC-R-10ML	285	MOD-05-5	334	MSCB-3110	18	P-002S-1	64
M-8330-ADD-34	82, 239	MES-13-5-SET	360	M-GRO-QC-R-10ML-PAK	285	MOD-06-0.5	334	MSCB-3132	18	P-002S-2	64
M-8330-ADD-35	122, 83	MES-14-1	360	M-GRO-QC-R/IS-5ML	285	MOD-06-1	334	MSCB-3141	18	P-002S-10X	114
M-8330-ADD-36	82, 239	MES-14-5	360	M-GRO-QC-R/IS-5ML-PAK	285	MOD-06-5	334	MSCB-3149	18	P-003N	47, 65
M-8330-ADD-37	82, 239	MES-15-1	360	M-HERB-1	64	MOD-07-0.5	334	MSCB-3174	18	P-003S	65, 114
M-8330-ADD-39	82, 239	MES-15-5	360	M-HERB-2	64	MOD-07-1	334	MSCB-4049	18	P-003S-10X	114
M-8330-ADD-40	82, 239	MES-16-1	360	M-HSL	141	MOD-07-5	334	MSCB-4052	18	P-004N	54
M-8330-ADD-41-R1	83, 239	MES-16-5	360	Mineral spirits	308	MOD-08-0.5	334	MSCB-4064	18	P-004S	54, 119
M-8330-ADD-43	82	MES-17-1	360	Mineral Spirits	307	MOD-08-1	334	MSCB-4070	18	P-005N	47, 65
M-8330-ADD-44	82	MES-17-5	360	Mirex	57, 121	MOD-08-5	334	MSCB-4087	18	P-005S	114, 65, 47
M-8330-ADD-45	82, 239	MES-18-R1-1	360	MISA-01-1	348	MOD-09A-0.5	334	MSCB-4091	18	P-005S-10X	114
M-8330-ADD-45-10X	82, 239	MES-18-R1-5	360	MISA-1-SET	348	MOD-09A-1	334	MSCB-4095	18	P-005S-A-10X	47
M-8330-ADD-46	82	MES-19-1	360	MISA-02-1	348	MOD-09A-5	334	MSCB-4101	18	P-006N	54
M-8330-ADD-46-10X	82	MES-19-5	360	MISA-03-1	348	MOD-09B-0.5	334	MSCB-4103	18	P-006S	54, 119
M-8330-ADD-47	82	MES-20-1	360	MISA-04-1	348	MOD-09B-1	334	MSCB-4110	18	P-007N	48
M-8330-ADD-47-10X	82	MES-20-5	360	MISA-05-1	348	MOD-09B-5	334	MSCB-4132	18	P-007S	48, 114
M-8330-ADD-48	82	MES-21-1-SET	360	MISA-06-1	348	MOD-09C-0.5	334	MSCB-4141	18	P-008N	51
M-8330-ADD-48-10X	82	MES-21-5-SET	360	MISA-A	244	MOD-09C-1	334	MSCB-4149	18	P-008S	51, 117
M-8330-ADD-49	85	MES-22-1	360	MISA-A-PAK	244	MOD-09C-5	334	MSCB-4174	18	P-008S-CN	51
M-8330-ADD-50	85	MES-22-5	360	MISA-BN-1	244	MOPCB-1001S	17	MSCB-IS	18	P-009N	48
M-8330-ADD-51	85	MES-23-1	360	MISA-BN-2	244	MOPCB-1002S	17			P-009S	48, 114
M-8330-ADD-52	85	MES-23-5	360	MISA-BN-3	244	MOPCB-1003S	17			P-010N	48
M-8330A-R	240, 83	MES-24-1	360	MISA-NC	244	MOPCB-1004S	17			P-010S	48, 115
M-8330A-R-10X	240, 83	MES-24-5	360	MISA-PEST	244	MOPCB-2002S	17			P-010S-10X	115
M-8330B	240, 83	M-GRA-ADD/IS	288	MISA-PEST-PAK	244	MOPCB-2003S	17	N-001N	19	P-011N	48
M-8330B-10X	240, 83	M-GRA-ADD/IS-R	289	MISA-VH-1/VH-2-SET	244	MOPCB-2004S	17	N-002N	19	P-011S	48, 115
M-8330B-R	240, 83	M-GRA-CAL/IS-SET	288	MISA-VH-2	244	MOPCB-2005S	17	N-003S	19, 20	P-011S-10X	115
M-8330B-R2	240, 83	M-GRA-CAL-R/IS-R-SET	289	MISA-VH-2-PAK	244	MOPCB-2006S	17	N-004N	19	P-012N	48
M-8330B-R2-10X	240, 83	M-GRA-FP	70, 291, 292, 293	MISA-VNH	244	MOPCB-3001S	17	N-005N	19	P-012S	48, 115
M-8330B-R-10X	240, 83	M-GRA-FP-PAK	291, 292, 293	MISA-VNH-PAK	244	MOPCB-3002S	17	N-1013S	19, 20, 89	P-012S-10X	115
M-8330-IS	118, 240, 82, 83	M-GRA-IS	291	MISA-VWS	244	MOPCB-3003S	17	N-1014S	19, 20, 89	P-013N	48
M-8330-IS-PAK	240, 83	M-GRA-IS-5ML	288, 290, 291, 294	m-Nitroaniline	76, 121, 197	MOPCB-3004S	17	N-1051S	19, 20, 89	P-013S	48, 115
M-8330-R	240, 83	M-GRA-IS-5ML-PAK	288, 290, 291, 294	MOBDE-1001S	32	MOPCB-3005S	17	N-1099S	19, 20, 89	P-014N	54
M-8330-R-0.1X	83	M-GRA-IS-AS-5ML	283	MOBDE-2001S	32	MOPCB-3006S	17	NF-467	262	P-014S	119, 54
M-8330-R-0.5X	83	M-GRA-IS-AS-5ML-PAK	283	MOBDE-2002S-0.2X	32	MOPCB-4001S	17	NF-467-PAK	262	P-015N	55
M-8330-R-10X-SET	83	M-GRA-IS-R	292	MOBDE-2003S	32	MOPCB-4002S	17	NF-467-R	262	P-015S-W	55
M-8330-R-SET	83	M-GRA-IS-R2	293	MOBDE-3001S	32	MOPCB-4003S	17	NF-467-R3	262	P-015S-W-10X	119
M-8330-SS	118, 240, 82, 83	M-GRA-IS-R2	293	MOBDE-3002S	32	MOPCB-4004S	17	NF-467-R4	262	P-016N	55
M-8410-IS	240	M-GRA-IS-R2-25ML	293	MOBDE-3003S	32	MOPCB-4005S	17	NF-467-R4-PAK	262	P-016S-A	55, 120
M-8410-IS-PAK	240	M-GRA-IS-R2-VAP	293	MOBDE-3004S	32	MOPCB-4007S	17	NF-467-R6	262	P-016S-CN	55, 120
M-8430	240	M-GRA-IS-R-10ML289, 290, 292, 294		MOBDE-3005S	32	MOPCB-4008S	17	NF-467-R6-PAK	262	P-017-CAL-SET	210
M-8440	240, 324, 341	M-GRA-IS-R-10ML-PAK289, 290, 292, 294		MOBDE-3006S	32	MOPCB-4009S	17	NF-467-R6-PAK	262	P-017N	49
M-8440-CON	240, 324, 341	M-GRA-IS-R-10ML-PAK289, 290, 292, 294		MOBDE-3007S	32	MOPCB-4011S	17	NF-467-R-PAK	262	P-017R-WL-5X-5ML	210
M-8440-CON-PAK	240, 324, 341	M-GRA-IS-R-10ML-PAK289, 290, 292, 294		MOBDE-4001S-0.2X	32	MOPCB-4012S-0.5X	17	NHI-001N	95	P-017R-WL-5X-10ML	210
M-8440-PAK	240, 324, 341	M-GRA-K1-SET	294	MOBDE-4002S-0.2X	32	MOPCB-5001S	17	NHI-002N	95	P-017R-WL-10X-5ML	210
M-8440-SGC	240, 324, 341	M-GRA-K2-SET	294	MOBDE-4003S	32	MOPCB-5002S	17	NHI-003N	95	P-017R-WL-10X-10ML	210
M-8440-SGC-PAK	240, 324, 341	M-GRA-K4-SET	294	MOBDE-4004S	32	MOPCB-5003S	17	NHI-004N	95	P-017S	49, 116
MA-900-100G	375	M-GRA-MSR	291	MOBDE-4005S-0.2X	32	MOPCB-5004S	17	NHI-005N	95	P-017S-1	64
MA-900-200G	375	M-GRA-MSR-PAK	291	MOBDE-4006S-0.2X	32	MOPCB-5009S	17	NHI-006N	95	P-017S-2	64
MA-1000-100G	375	M-GRA-QC-10ML	288, 289, 296	MOBDE-4007S	32	MOPCB-5010S	17	NHI-SET	95	P-017S-10X	116
MA-1000-200G	375	M-GRA-QC-10ML-PAK	288, 289, 296	MOBDE-4008S	32	MOPCB-6001S	17			P-017S-20X	174
MA-3000-100G	375	M-GRA-QC-10ML-PAK	288, 289, 296	MOBDE-4009S	32	MOPCB-6003S	17			P-017S-H-10X	138, 146, 177, 207, 226
MA-3000-200G	375	M-GRA-QC/IS-5ML	288	MOBDE-4009S-0.2X	32	MOPCB-7001S-0.5X	17			P-017S-H-10X-PAK	138, 146, 177, 207, 226
MA-5000-100G	375	M-GRA-QC/IS-5ML-PAK	288	MOBDE-4010S	32	MOSOL-75	375			P-018N	55
MA-5000-200G	375	M-GRA-QC/IS-R-5ML	289	MOBDE-5001S-0.2X	32	M-PAPCLUS	186			P-018S	55, 120
M-CONV-IS/SS	145, 199	M-GRA-QC/IS-R-5ML-PAK	289	MOBDE-5002S-0.2X	32	M-PCBL	15			P-019N	50
MCS-01-1	356	M-GRA-QC-R-10ML	294	MOBDE-5003S-0.2X	32	M-PCBL-PAK	15			P-019S	50, 116
MCS-01-5	356	M-GRA-QC-R-10ML-PAK	294	MOBDE-5004S	32					P-020N	50
MCS-02-1	356	M-GRA-QC-R/IS-5ML	294	MOBDE-5005S-0.2X	32					P-020S	50, 116
MCS-02-5	356	M-GRA-QC-R/IS-5ML-PAK	294	MOBDE-5006S-0.2X	32						

Catalog Number Index

P-021S-1	64	P-059S-1	64	P-095N	49	P-139S	49, 116	P-181S	48, 115	P-228N	51
P-022N	56	P-059S-2	64	P-095S	49, 115	P-140N	51	P-182N	49	P-228S	117
P-022S	56, 120	P-059S-10X	120	P-096N	61	P-140S	51	P-182S	49, 115	P-229N	52
P-023N	57	P-060N	56	P-096S	61, 123	P-140S-CN	51	P-183N	53	P-229S	52, 118
P-023S	57	P-060S	56	P-097N	58	P-141N	51	P-183S	53, 119, 160, 166	P-230N	52
P-024N	51	P-061N	61	P-097S	58, 122	P-141S	51, 117	P-183S-10X	119	P-230S	52, 118
P-024S	51, 117	P-061S	61, 123	P-097S-10X	122	P-141S-CN	51	P-184N	58	P-231N	52
P-025N	51	P-062N	47	P-098N	63	P-142N	51	P-184S	58, 121	P-231S	52, 118, 166
P-025S	51, 117	P-062S	47	P-099N	59	P-142S	51, 117	P-186S	55	P-231S-10X	118
P-026N	51	P-063N	60	P-099S	59, 122	P-143N	52	P-187N	59	P-232N	52
P-026S	51, 117	P-063S	60, 123	P-099S-10X	122	P-143S	52, 118	P-187S	59	P-232S	52, 118
P-027N	51	P-064N	57	P-100N	56	P-143S-CN	52	P-188N	61	P-233N	53
P-027S	51, 117	P-064S	57, 120	P-100S	56, 120	P-144N	52	P-188S	61, 123	P-233S	53, 119
P-027S-1	64	P-064S-1	64	P-101N	47	P-144S	52, 118	P-189N	55, 65	P-233S-10X	119
P-027S-2	64	P-064S-2	64	P-101S	47	P-145N	53	P-189S	55, 65	P-234N	59
P-028N	51	P-064S-10X	120	P-102N	47	P-145S	53, 119	P-190N	61	P-234S	59, 122
P-028S	51, 117	P-065N	57	P-102S	47, 114	P-145S-10X	119	P-190S	61, 123	P-234S-10X	122
P-029N	51	P-065S	57, 121	P-102S-10X	114	P-146N	53	P-191N	49	P-235N	51
P-029S	51, 117	P-066N	57	P-103N	47	P-146S	53, 119	P-191S	49, 115	P-235S	51, 117
P-029S-1	64	P-066S	57, 121	P-103S	47	P-147N	53	P-191S-10X	115	P-235S-H-10X	117
P-029S-2	64	P-067N	61	P-104N	48	P-147S	53, 119	P-192N	62	P-236N	58
P-030N	57	P-067S	61, 123	P-104S-CN	48, 114	P-148N	54	P-192S	62	P-236S	58, 122
P-030S	57, 121	P-068N	61	P-105N	62	P-148S	54, 119	P-193N	54	P-236S-10X	122
P-031N	51	P-068S	61, 123	P-105S	62, 123	P-149N	54	P-193S	54, 119	P-237N	48
P-031S	51	P-069N	62	P-105S-10X	123	P-149S-CN	54, 119	P-194N	54	P-237S	48, 114
P-032N	57	P-069S	62, 123	P-106N	49	P-150N	51	P-194S	54, 119	P-238N	53
P-032S	57	P-070N	58	P-106S	49, 115	P-150S	51, 117	P-195N	57	P-238S	53
P-033N	51	P-070S	58, 122	P-107N	49	P-151S	55, 120	P-195S	57, 120	P-239N	53
P-033S	51, 117	P-071N	51	P-107S	49, 116	P-152N	56	P-196N	51	P-239S	53, 119
P-034N	57	P-071S	51, 117	P-107S-10X	116	P-152S	56, 120	P-196S	51, 116	P-240N	63
P-034S	57, 121	P-072S-CN	49	P-108N	48	P-152S-10X	120	P-197N	62	P-240S	63, 124
P-035N	51	P-073N	63	P-108S	48, 115	P-153N	56	P-197S	62, 124	P-241N	48
P-035S	51, 117	P-073S	63	P-109N	51	P-153S	56, 120	P-197S-10X	124	P-241S	48, 115
P-035S-10X	117	P-074N	57	P-109S	51, 117	P-153S-CN	56	P-198N	59	P-242N	51
P-036N	52	P-074S	57, 121	P-110N	54	P-154N	56	P-198S	59, 122	P-242S	51, 117
P-036S	52, 118	P-075N	59	P-110S	54, 119	P-154S	56	P-199N	58	P-242S-10X	117, 162
P-037N	52	P-075S	59, 122	P-111N	63	P-154S-CN	56, 120	P-199S	58, 122	P-242S-10X-PAK	162
P-037S	52, 118	P-076N	63	P-111S	63, 124	P-155N	57	P-200N	47	P-242S-CN	51
P-037S-1	64	P-076S	63	P-112N	57	P-155S	57, 121	P-200S-A	47, 114	P-243N	49
P-037S-2	64	P-077N	65	P-112S	57, 121	P-156N	57	P-200S-A-10X	114	P-243S	49, 116
P-037S-10X	118	P-077S	59, 65	P-113N	58	P-156S	57	P-201N	47	P-244N	51
P-038N	56	P-078N	59, 65	P-113S	58	P-157N	57	P-201S	47, 114	P-244S	51, 150
P-038S	56, 120	P-078S	59, 65	P-114N	53	P-157S	57, 120	P-202N	48	P-244S-CN	51
P-039N	45, 52	P-079N	59, 65	P-114S	53, 119	P-158N	57	P-202S	48, 114	P-245N	47
P-039S	45, 52	P-079S	59, 65	P-115N	60	P-158S	57, 121	P-203N	48	P-245S	47, 114
P-039S-10X	118	P-080N	60	P-115S	60, 123	P-158S-10X	121	P-203S	48, 114	P-245S-10X	114
P-040N	56	P-080S	60, 123	P-115S-1	64	P-159N	57	P-204N	48	P-245S-CN	47
P-040S	56, 120	P-081N	48	P-116S	61	P-159S	57, 121	P-204S	48, 115	P-246N	47
P-041N	57	P-081S	48, 115	P-117N	62	P-160N	57	P-205N	55	P-246S	47, 114
P-041S	57, 121	P-082N	57	P-117S	62, 123	P-160S	57, 121	P-205S	55	P-246S-10X	114
P-042N	52	P-082S	57, 121	P-117S-10X	123	P-161N	58	P-206N	56	P-247N	57
P-042S	52, 118	P-083N	49	P-118N	62	P-161S	58, 122	P-206S	56, 120	P-247S	57, 120
P-043N	58	P-083S	49, 115	P-118S	62, 123	P-162N	58	P-207N	61	P-247S-10X	120, 162
P-043S	58	P-083S-10X	115	P-118S-10X	123	P-162S	58, 122	P-208N	61	P-247S-10X-PAK	162
P-044N	62	P-084N	60	P-119N	59	P-163N	59	P-208S	61, 123	P-248N	50
P-044S	62, 124	P-084S	60, 123	P-119S	59, 122	P-163S	59, 122	P-209N	62	P-248S	50, 116
P-045N	53	P-084S-10X	123	P-120N	56	P-164N	59	P-209S	62, 124	P-249N	57
P-045S	53, 119, 146	P-084S-CN	60	P-120S	56, 120	P-164S	59, 122	P-210N	62	P-249S	57, 120
P-045S-1	64	P-085N	60, 65	P-121N	58	P-165N	60	P-210S	62, 124	P-251N	59
P-045S-2	64	P-085S	60, 65, 123	P-121S	58, 122	P-165S	60	P-211N	51	P-251S	59, 122
P-045S-10X	119	P-086N	48	P-121S-10X	122	P-166N	60	P-211S	51, 117	P-252N	57
P-046N	53	P-086S	48, 115	P-122N	63	P-166S	60	P-212N	49	P-252S	57, 120
P-046S	53, 119	P-087N	53	P-122S	63, 124	P-167N	60	P-212S	49	P-253N	51
P-046S-10X	119	P-087S	53, 119	P-122S-10X	124	P-167S	60, 123	P-213N	50	P-253S	51, 117
P-047N	59	P-087S-H	53	P-123N	55	P-168N	61	P-213S	50, 116	P-254N	49
P-047S	59, 122	P-088N	49	P-123S	55, 120	P-168S	61, 123	P-214N	57	P-254S	49, 115
P-048N	53	P-088S	49, 115	P-123S-10X	120	P-168S-10X	123	P-214S	57, 120	P-255N	51
P-048S	53, 119	P-088S-10X	115, 256	P-124N	56	P-168S-CN	61	P-215N	59	P-255S	51, 117
P-049N	59	P-089N	57	P-124S	56	P-169N	61, 65	P-215S	59, 122	P-256N	48
P-049S	59	P-089S	57, 121	P-125N	61	P-169S	61, 65	P-215S-10X	122	P-256S	48, 115
P-050N	61	P-089S-10X	121	P-125S	61, 123	P-170N	58	P-216N	49	P-257N	48
P-050S	61, 123	P-090N	62	P-126N	62	P-170S	58, 122	P-216S	49, 115	P-257S	48, 115
P-051N	58	P-090S	62, 124	P-126S	62, 123	P-171S	62, 123	P-217N	58	P-258N	54
P-051S	58, 122	P-091N	53	P-127N	62	P-172N	62	P-217S	58	P-258S	54, 119
P-052N	59	P-091S	53, 119	P-127S	62, 124	P-172S	62, 124	P-218S	50	P-259N	53
P-052S	59	P-092N	53	P-128N	58	P-172S-H-10X	124	P-219N	52	P-259S	53, 119
P-053N	55	P-092S	53, 119	P-128S	58, 122	P-173N	52	P-219S	52, 118	P-260N	59
P-053S	55, 119	P-092S-10X	119	P-129N	53	P-173S	52, 118	P-220N	53	P-260S	59, 122
P-053S-1	64	P-093-CAL-SET	210	P-129S	53, 119	P-174N	47	P-220S-A	53, 119	P-261N	61
P-053S-2	64	P-093N	62	P-130N	47	P-174S	47	P-221N	50	P-261S	61, 123
P-053S-10X	119	P-093S	62	P-131N	47	P-175N	50, 65	P-221S	50	P-262N	50
P-054N	55	P-093S-1	64	P-131S	47, 114	P-175S	50, 65	P-222N	50	P-262S-CN	50, 116
P-054S	55, 119	P-093S-10X	123	P-132S	47, 114	P-176N	57	P-222S	50, 116	P-263N	51
P-054S-10X	119	P-093S-H-10X	138, 146, 177, 207, 226	P-133N	49	P-176S	57, 121	P-222S-10X	116	P-263S	51, 117
P-055N	55	P-093S-H-10X-PAK	138, 146, 177, 207, 226	P-133S-CN	49, 116	P-177N	48	P-223N	50	P-263S-10X	117
P-055S	55, 120	P-093-WL-5X-5ML	210	P-133S-CN-10X	116	P-177S-A	48, 115	P-223S	50, 116	P-264N	52
P-056N	60	P-093-WL-5X-10ML	210	P-134N	49	P-177S-CN	48	P-224N	56	P-264S	52
P-056S	60, 123	P-093-WL-10X	139	P-134S-H	49, 116	P-178N	52	P-224S	56, 120	P-265N	59
P-057N	56	P-093-WL-10X-5ML	139, 210	P-135N	49	P-178S	52, 118	P-225N	50	P-265S	59
P-057S	56, 120	P-093-WL-10X-10ML	210	P-135S	49, 116	P-179N	57	P-225S	50, 116	P-266N	62
P-058N	53	P-094N	53	P-136N	49	P-179S	57, 121	P-225S-10X	116	P-266S	62, 123
P-058S	53, 119	P-094S	53, 119	P-136S	49, 116	P-180N	61	P-226N	51	P-267N	47
P-058S-10X	119	P-094S-10X	119	P-139N	49	P-180S	61, 123	P-226S	51	P-267S	47, 114
P-059N	56					P-180S-10X	123	P-227N	56	P-268N	62
P-059S	56, 120					P-181N	48	P-227S	56, 120	P-268S	62, 123

Catalog Number Index

P-269N	53	P-320S	51, 117	P-368S	53	P-418S	60	P-467N	61	P-515N	62
P-269S	53, 119	P-320S-CN	51, 117	P-369N	61	P-419N	53	P-467S	61, 123	P-515S	62, 124
P-270N	54	P-321N	62	P-369S	61	P-419S	53, 119	P-468N	61	P-516N	62
P-270S	54, 119	P-321S	62, 123	P-370N	56	P-420N	50	P-468S	61	P-516S	62, 124
P-271N	51	P-321S-CN	62, 123	P-370S	56, 120	P-420S	50, 116	P-469N	51	P-518N	49
P-271S	51, 117	P-322N	56	P-371N	56	P-420S-H	50, 116	P-469S	51	P-518S	49
P-272N	49	P-323S	55	P-371S	56, 120	P-422N	62	P-470N	50	P-520N	49
P-272S	49, 116	P-324N	63	P-372N	48	P-422S	62	P-470S	50, 118	P-520S	49
P-273N	58	P-324S	63	P-372S	48, 115	P-423S	53	P-470S-CN	50, 118	P-521S	54
P-273S	58, 121	P-325N	60	P-372S-10X	115	P-424N	51	P-471N	55	P-522N	55
P-274N	47	P-325S	60	P-373N	50	P-424S	51, 117	P-471S	55	P-522S	55, 120
P-274S	47, 114	P-326S	55, 120	P-373S	50, 116	P-425N	58	P-472N	50	P-523N	61
P-275N	51	P-326S-MC	65	P-375N	50	P-425S	58	P-472S	50	P-523S	61, 123
P-275S	51, 117	P-327N	60	P-375S	50	P-426N	51	P-473N	50	P-523S-CN	61, 123
P-276N	47	P-327S	60	P-376N	51	P-426S	51	P-473S	50	P-524N	52
P-276S	47, 114	P-328N	59	P-376S	51	P-427N	52	P-474N	51	P-524S	52
P-277N	58	P-328S	59	P-377N	52	P-427S	52, 118	P-474S	51	P-525N	53
P-277S	58, 122	P-329N	49	P-377S	52	P-427S-10X	118, 233	P-475N	55	P-525S	53
P-278N	49	P-329S	49	P-378S	54	P-428N	47	P-475S	55	P-526N	62
P-278S	49	P-330N	57	P-379N	55	P-429N	52	P-476N	58	P-526S	62
P-279N	49	P-330S	57, 121	P-379S	55, 120	P-429S	52, 118	P-476S	58, 122	P-527N	63
P-279S	49, 115	P-330S-10X	121	P-380N	56	P-430N	59	P-477N	62	P-528N	55
P-280N	62	P-331S	58, 122	P-380S	56	P-430S	59	P-477S	62	P-528S	55
P-280S	62, 123	P-331S-0.1X	58	P-381N	57	P-431N	54	P-478N	62	P-529N	56
P-282N	56	P-331S-H	58, 122	P-381S	57	P-431S	54	P-478S	62	P-529S	56
P-283N	55	P-332N	55	P-382N	57	P-432N	60, 65	P-479S-CN	62	P-530N	47
P-283S	55	P-332S	55	P-382S	57	P-432S	60, 65	P-480N	53	P-530S	47
P-284S-CN	49, 116	P-333N	49	P-383N	57	P-433N	58	P-480S	53	P-531N	50
P-285S	55, 65	P-333S	49	P-383S	57, 121	P-433S	58	P-481N	53	P-531S	50
P-286S	50	P-334N	62	P-384N	52	P-434N	50	P-481S-A	53	P-532N	54
P-287N	47	P-334S	62, 123	P-384S	52, 118	P-434S	50	P-482N	51	P-532S	54
P-287S-H	47, 114	P-335N	62	P-384S-10X	118	P-435N	53	P-482S	51, 117	P-533N	56
P-288N	52	P-335S	62, 124	P-385N	52	P-435S	53	P-483N	52	P-533S	56
P-288S	52, 118	P-336N	60	P-385S	52	P-436N	57	P-483S	52	P-534N	52
P-289N	62	P-337N	56	P-386N	52	P-436S	57	P-484N	48	P-534S	52
P-289S	62, 124	P-337S	56	P-386S	52	P-437N	57	P-484S	48	P-535S	120, 57
P-289S-CN	62, 124	P-338N	49	P-387N	53	P-437S	57	P-485N	59	P-535S-TP	57
P-290S	58, 122	P-338S	49	P-387S	53	P-438N	50, 116	P-485S	59	P-536N	65
P-291S	62, 124	P-339N	60	P-388N	53	P-439N	51	P-486N	62	P-536S-MC	65
P-292N	50	P-339S	60	P-388S	53	P-439S-H	51, 116	P-486S	62	P-537N	49, 65
P-292S	50, 116	P-340N	48	P-389N	53	P-440N	61	P-487N	51	P-537S-MC	49, 65
P-293N	60	P-340S	48	P-389S	53	P-440S-CN	61, 123	P-487S	51	P-538N	51, 65
P-293S-CN	60, 123	P-341N	54	P-391N	58	P-441N	61	P-488S	50, 116	P-538S-MC	51, 65
P-294S	55, 119	P-341S	54	P-391S	58, 122	P-441S-CN	61, 123	P-489N	58	P-539N	49, 65
P-295N	51	P-342N	57	P-392N	58	P-442N	52	P-489S	58	P-539S-MC	49, 65
P-295S	51, 117	P-342S	57, 121	P-392S	58	P-442S	52, 118	P-490N	48	P-540N	49, 65
P-295S-10X	117	P-343N	47, 65	P-393N	58	P-443N	52	P-490S	48	P-540S-MC	49, 65
P-296N	50	P-343S	114, 47, 65	P-393S	58	P-443S	52, 118	P-491N	54	P-541N	49, 65
P-296S	50, 116	P-344N	63, 65	P-394N	59	P-444N	51	P-491S	54	P-541S-MC	49, 65
P-297N	58	P-344S-MC	47, 65	P-394S	59	P-444S	51, 117	P-492N	62	P-544S-MC	47, 65
P-297S	58, 121	P-345N	47, 65	P-395N	59	P-445N	48	P-492S	62	P-545N	50
P-297S-10X	121	P-345S	47, 65, 114	P-395S	59, 122	P-445S	48, 115	P-493N	50	P-545S	50
P-298S-A	56, 120	P-346N	51	P-395S-10X	122	P-445S-10X	115	P-493S	50	P-546N	52
P-299N	52	P-346S	51, 117	P-396N	60	P-446N	49	P-494N	57	P-546S	52
P-299S	52, 118	P-346S-CN	51, 117	P-396S	60, 123	P-446S	49, 115	P-494S	57	P-547N	55
P-300N	62	P-347N	48	P-397N	48	P-447N	52	P-495S-W	50	P-547S	55
P-300S	62	P-347S	48, 114	P-397S	48, 114	P-447S	52	P-496N	55	P-548N	50
P-301N	49	P-348N	59	P-398N	49	P-448N	53	P-496S	55, 119	P-548S-CN	50
P-301S	49	P-348S	59	P-398S	49, 116	P-448S	53	P-496S-CN	55, 119	P-549N	59
P-302N	56	P-349N	62	P-399N	49	P-449N	55	P-497N	55	P-549S	59
P-302S	56	P-349S	62	P-399S-A	49	P-449S	55	P-497S	55, 119	P-550N	49
P-303N	52	P-350N	63	P-401N	49	P-450N	58	P-498N	47	P-550S	49
P-303S	52, 118	P-350S	63	P-401S	49, 116	P-450S	58	P-498S	47	P-551N	54
P-304N	59	P-351N	48	P-401S-10X	116	P-451N	61	P-499N	48	P-551S	54
P-304S	59, 122	P-351S	48, 115	P-402N	50	P-451S	61, 123	P-499S	48	P-552N	61
P-305N	59	P-352N	47	P-402S	50	P-452N	61	P-500N	55	P-552S	61
P-305S	59, 122	P-352S	47, 114	P-403N	55	P-452S	61	P-500S	55	P-553N	62
P-306N	60	P-353N	48	P-403S	55	P-453N	58	P-501N	60	P-553S	62
P-306S-CN	60	P-353S	48	P-404N	60	P-453S	58, 122	P-501S	60	P-554N	51
P-307N	62	P-354N	50	P-404S	60	P-453S-10X	122	P-502N	56	P-554S	51
P-307S	62	P-354S	50	P-405N	62	P-454N	48	P-502S	120, 56	P-555S	50
P-308N	62	P-355N	51	P-405S	62	P-454S	48, 114	P-504N	61	P-556N	57
P-308S	62	P-355S	51, 117	P-406N	61	P-454S-10X	114	P-504S	61	P-556S	57
P-309S	47	P-356N	54	P-406S	61	P-455N	62	P-505N	60	P-557N	62
P-310N	54	P-356S	54	P-407N	47	P-455S	62	P-505S-W	60	P-557S	62
P-310S	54, 119	P-356S-CN	54, 119	P-407S	47, 114	P-457N	48	P-506N	56	P-558N	49
P-311N	57	P-357N	59	P-408N	49	P-457S	48	P-506S	56	P-558S	49
P-311S	57, 121	P-357S	59	P-408S	49, 116	P-458N	50	P-507N	62	P-559N	48
P-312N	59	P-358N	58	P-409N	47	P-459N	62	P-507S	62, 124	P-559S	48
P-312S	59	P-358S	58	P-409S-CN	47	P-459S	62	P-507S-CN	62, 124	P-560S	58
P-313N	50	P-359N	59	P-410N	47	P-459S-CN	62	P-508N	62	P-561N	50
P-313S	50	P-359S	59	P-410S	47	P-460N	58	P-508S	62, 124	P-561S	50
P-314N	49	P-361N	62	P-411N	50	P-460S	58, 122	P-508S-CN	124	P-562N	49
P-314S	49	P-361S	62	P-411S	50	P-461N	57	P-509N	57	P-562S	49
P-315N	52	P-363N	58	P-412N	54	P-461S	57	P-509S	57, 121	P-563N	57
P-315S	52	P-363S	58	P-412S	54, 119	P-462N	60	P-510N	47	P-563S	57
P-316N	48	P-364N	53	P-414N	55	P-462S	60	P-510S	47	P-564N	57
P-316S	48	P-364S	53	P-414S	55	P-463N	57	P-511N	48	P-564S	57
P-317N	56	P-365N	54	P-415N	57	P-463S	57, 121	P-511S	48	P-565N	52
P-317S	56	P-365S	54, 119	P-415S	57, 121	P-464N	61	P-512N	57	P-565S	52
P-318N	56	P-366N	54	P-415S-CN	57, 121	P-464S	61	P-512S	57, 121	P-566N	51
P-318S	56	P-366S	54, 119	P-416N	57	P-465N	47	P-513N	52	P-566S	51
P-319N	53	P-367N	56	P-417N	59	P-465S	47, 114, 117	P-513S	52	P-567N	57
P-319S	53	P-367S	56	P-417S	59	P-466S	57, 120	P-514N	52	P-567S	57
P-320N	51	P-368N	53	P-418N	60	P-466S-10X	120	P-514S	52	P-568S	61, 123

Catalog Number Index

P-569N	54	P-627N	62	P-690S	50, 116	P-743N	62	P-844S-CN	52	P-964N	53
P-569S	54	P-627S	62, 123	P-690S-CN	50, 116	P-743S	62	P-845N	52	P-964S-CN	53
P-570N	57	P-628N	52	P-691N	51	P-744N	52	P-845S-CN	52	P-965S-CN	59
P-570S-CN	57	P-628S	52	P-691S	51	P-744S	52	P-847N	53	P-966N-5MG	58
P-571S	55	P-630S	49	P-692N	60	P-745N	56	P-847S-CN	53	P-966S	58
P-572S	52	P-631N	56	P-692S	60	P-745S	56	P-848N	53	P-967S-CN	58
P-573N	48	P-631S	56	P-692S-CN	60	P-746N	55	P-848S-CN	53	P-969N	50
P-573S	48	P-632N	52, 65	P-693N	60	P-746S	55	P-849S-CN	53	P-969S	50
P-574N	49	P-632S	52, 65	P-693S	60	P-747N	52	P-850N	53	P-970S-CN	63
P-574S	49	P-633N	57, 65	P-694N	54	P-747S	52	P-850S-CN	53	P-971N	47
P-575N	52	P-633S	57, 65	P-694S	54	P-749N	60	P-852N	54	P-971S-CN	47
P-575S	52	P-635N	56, 65	P-695N	58	P-749S	60	P-852S-CN	54	P-973S-CN	47
P-577S	49	P-635S	56, 65	P-695S	58	P-753N	54	P-853S-CN-0.1X	55	P-975S-CN	50
P-578N	54	P-636N	51	P-696N	60	P-753S	54	P-855N	56	P-979N	56
P-578S	54	P-636S	51, 116	P-696S	60	P-755N	50	P-855S-CN	56	P-979S-CN	56
P-579N	58	P-637S-EA-0.1X	49	P-697N	55	P-755S-CN	50	P-856S-CN	57	P-981S-CN	50
P-579S	58	P-640N	51	P-697S	55	P-771S-CN	49	P-856S-CN-0.1X	57	P-982S-CN	50
P-580N	52	P-640S-A	51	P-698N	54	P-772N-5MG	48	P-857N	57	P-983S-CN	55
P-580S	52	P-641N	52	P-698S	54	P-772S	48	P-857S-CN	57	P-984S	56
P-582N	52	P-641S-CN	52	P-699N	54	P-779N	52	P-858N	58	P-985N	60
P-582S	52, 118	P-642N	52	P-699S	54	P-779S	52	P-858S-CN	58	P-985S	60
P-583N	58	P-642S	52	P-700N	50	P-780S-A	54, 119	P-859N	58	P-987S	60
P-583S	58	P-643N	52	P-700S	50	P-781N-5MG	54	P-859S-CN	58	P-988N	55
P-584N	50	P-643S	52	P-701N	49	P-781S-A	54, 119	P-860N	59	P-988S	55
P-584S	50	P-644N	53	P-701S	49	P-782S-A	54	P-860S-CN	59	P-989S	60
P-586N	54	P-644S	53	P-702N	62	P-783N	53	P-861N	59	P-990N	60
P-586S	54	P-645N	53	P-702S	62	P-783S	53	P-861S-CN	59	P-990S	60
P-587N	54	P-645S	53	P-703N	62	P-784N	53	P-863N	59	P-991S	53
P-587S	54	P-646N	48	P-703S-CN	62	P-784S	53	P-863S-CN	59	P-992S-D	54
P-588N	53	P-646S	48	P-704N	56	P-785N	53	P-864N	60	P-993N	54
P-588S	53	P-647N	54	P-704S	56	P-785S-CN	53	P-864S-CN	60	P-993S	54
P-589N	55	P-647S	54	P-705N	54	P-787S-H	53	P-865S-CN-0.1X	60	P-995N	58
P-589S	55	P-648N	55	P-705S	54	P-788N	58	P-866N	61	P-995S	58
P-589S-CN	55	P-648S	55	P-707N	57	P-788S-CN	58	P-866S-CN	61	P-996N-5MG	53
P-591N	57	P-649N	56	P-707S-A	57	P-789S-CN	54	P-867N	62	P-996S	53
P-591S-CN	57	P-649S	56	P-708N	53	P-791S-CN	50	P-867S-CN	62	P-997N	54
P-592N	62	P-650N	57	P-709N	50	P-792S-CN	59	P-868S-TP-0.1X	62	P-997S	54
P-592S	62	P-650S	57	P-709S	50	P-794N	49	P-869N	60	P-998S	47
P-593N	52	P-652S	57	P-710N	59	P-794S	49	P-869S-CN	60	P-999N	61
P-593S	52	P-653S-TP-0.1X	58	P-710S-A	59	P-795N	60	P-874N	56	P-999S	61
P-594N	48	P-655S-H	58, 122	P-711S	47	P-795S-CN	60	P-874S	56	P-1000N	61
P-594S	48	P-656N	59	P-712N	50	P-798N	60	P-875N	58	P-1000S	61
P-595N	49	P-658N	55	P-712S	50	P-798S-CN	60	P-875S-CN	58	P-1001N	61
P-595S	49	P-658S	55	P-713N	52	P-801S-CN	48	P-877N	61	P-1001S-TP	61
P-596N	55	P-659N	54	P-713S	52	P-802N	54	P-877S	61	P-1002N	62
P-596S	55	P-659S	54	P-714S-CN	59	P-802S	54	P-878N	54	P-1002S-TP	62
P-597N	48	P-660N	53	P-715S-CN	59	P-804S-CN	55	P-878S-CN	54	P-1003N	61
P-597S	48, 114	P-660S	53	P-716S	59	P-806N	55	P-879S	61	P-1003S	61
P-598N	53	P-661N	56	P-717N	60	P-806S-CN	55	P-880S-CN	55	P-1004N	62
P-598S	53	P-661S	56	P-717S	60	P-807N	49	P-882N-5MG	60	P-1004S	62
P-599N	52	P-662S	53	P-718N	56	P-807S	49	P-882S	60	P-1005N	51
P-599S	52	P-663N	59	P-718S	56	P-808N	61	P-884N	54	P-1005S-T	51
P-600N	56	P-663S	59	P-719N	48	P-808S	61	P-884S	54	P-1006N	62
P-600S	56, 120	P-664N	48	P-719S	48	P-810S-CN	54	P-890S-CN	47	P-1006S	62
P-601N	54	P-664S	48	P-720N	50	P-811N	48	P-893N	55	P-1007N	57
P-601S	54, 119	P-665N	48	P-720S	50	P-811S	48	P-893S-CN	55	P-1007S	57
P-602S-CN	50, 116	P-665S	48	P-721N	61	P-820N	47	P-895N	47	P-1008N	51
P-602S-CN-10X	116	P-666N	62	P-721S	61	P-820S-CN	47	P-895S	47	P-1008S	51
P-603N	53	P-666S	62	P-722N	52	P-821N	47	P-896N	53	P-1009N	50
P-603S	53	P-667S	59	P-722S	52	P-821S-CN	47	P-896S	53	P-1009S	50
P-604N	52	P-668S	60	P-723N	60	P-822N	49	P-900S-CN	57	P-1010N	56
P-604S	52	P-669N	48	P-723S	60	P-822S-CN	49	P-902S-CN	54	P-1010S	56
P-605N	54	P-669S	48	P-724N	54	P-823N	50	P-904N	52	P-1012S	48
P-605S	54	P-670N	47	P-724S	54	P-823S-CN	50	P-904S	52	P-1013N	57
P-606N	52	P-670S	47	P-725N	52	P-824S-CN	53	P-905S-CN	52	P-1013S	57
P-606S	52	P-671N	48	P-725S-A	52	P-825S-CN	53	P-907N	54	P-1014N	59
P-607S	54	P-671S	48	P-726N	61	P-826S-CN	54	P-907S	54	P-1014S-W-0.5X	59
P-608N	59	P-672N	49	P-726S	61	P-827S-CN-0.1X	54	P-908N	59	P-1015N	59
P-609N	55	P-672S	49	P-727N	61	P-828S-CN	54	P-908S	59	P-1015S-A	59
P-609S	55	P-673N	50	P-727S	61	P-829N	55	P-926N	54	P-1016N	62
P-610S	60	P-673S	50	P-728N	60	P-829S-CN	55	P-926S	54	P-1016S	62
P-611N	57	P-674S	50	P-728S	60	P-830N	55	P-927N	54	P-1017N	49
P-611S	57	P-675N	51	P-729S	61	P-830S-CN	55	P-927S	54	P-1017S-CN	49
P-612S	55	P-675S	51, 117	P-730N	61	P-831N	55	P-929N	50	P-1018S-T-0.1X	58
P-613N	61	P-676N	54	P-730S	61	P-831S-CN	55	P-929S	50	P-1019S-CN-0.5X	55
P-613S	61	P-676S	54	P-732N	59	P-832N	56	P-934S	52	P-1020S-A-0.5X	52
P-615N	47	P-677N	48	P-732S	59	P-832S-CN	56	P-935N	52	P-1021S	54
P-615S	47	P-677S	48	P-733S-T	59	P-833N	59	P-935S-CN	52	P-1021S-0.5X	54
P-617S	53	P-678N	48	P-734N	58	P-833S-CN	59	P-938N	60	P-1022N	55
P-618N	59	P-678S	48	P-734S	58	P-834N	59	P-940N	49	P-1022S	55
P-618S	59, 122	P-679N	48	P-735N	50	P-834S-CN	59	P-940S	49	P-1023N	56
P-620N	49	P-679S	48	P-735S	50	P-835N	59	P-944N-5MG	50	P-1023S-CN	56
P-620S	49	P-680N	54	P-737N	57	P-835S-CN	59	P-944S	50	P-1024N	54
P-621N	61	P-680S	54	P-737S	57	P-836N	60	P-947N	50	P-1024S-A	54
P-621S	61	P-681S	60	P-738N	54	P-836S-CN	60	P-947S	50	P-1025N	54
P-622N	53	P-683S-CN	50	P-738S	54, 119	P-837N	60	P-949N	49	P-1025S-CN	54
P-622S	53	P-684S	50	P-738S-A	54, 119	P-837S-CN	60	P-951N	60	P-1026N	49
P-623N	53	P-686N	54	P-739N	59	P-838N	61	P-951S	60	P-1026S	49
P-623S	53	P-686S	54, 119	P-739S	59	P-838S-CN	61	P-952N	49	P-1027N	51
P-624N	57	P-687N	54	P-740N	56	P-839S-CN-0.1X	62	P-952S	49	P-1027S-CN	51
P-624S	57	P-687S	54	P-740S	56	P-840N	62	P-953S-CN	54	P-1028S-CN	56
P-625N	47	P-688S	61	P-741N	52	P-840S-CN	62	P-957S-CN	49	P-1029N	56
P-625S-W	47	P-689N	62	P-741S	52	P-842S-CN	47	P-958S-CN	55	P-1029S-CN	56
P-626N	62	P-689S	62	P-742N	59	P-843N	49	P-960S-CN	60	P-1030S-0.5X	60
P-626S	62	P-690N	50	P-742S	59	P-843S-CN	49	P-962S-CN	56	P-1031N	58

Catalog Number Index

P-1031S-CN	58	P-1144S-CN	59	PE-MECAL4-ASL-5	366	PFRS-011S	38	PLAS-AX-018S	88	PLAS-AX-099N	87
P-1032N	57	P-1150S-CN	54	PE-MECAL5-ASL-1	366	PFRS-012S	38	PLAS-AX-019N	87	PLAS-AX-103N	87
P-1032S-CN	57	P-1151S-CN	52	PE-MECAL5-ASL-5	366	PFRS-013S	38	PLAS-AX-019S-M	87	PLAS-AX-105N	87
P-1034N	62	P-1152S-CN	47	PE-MEINT-ASL-1	366	PFRS-014S	38	PLAS-AX-020N	88	PLAS-AX-106N	88
P-1034S	62	P-1153S-CN	58	PE-MEINT-ASL-5	366	PFRS-015S	38	PLAS-AX-020S	88	PLAS-AX-107N	87
P-1035N	51	P-1154N	59	PE-MEM1-ASL-1	366	PFRS-016S	38	PLAS-AX-021N	87	PLAS-AX-108N	87
P-1035S	51	P-1154S-CN	59	PE-MEM1-ASL-5	366	PFRS-017S	38	PLAS-AX-021S	87	PLAS-AX-109N	88
P-1036S-CN-0.5X	47	P-1155N	54	PE-MEM2-ASL-1	366	PFRS-018S	38	PLAS-AX-022N	88	PLAS-AX-110N	87
P-1037N	47	P-1156S-CN	59	PE-MEM2-ASL-5	366	PFRS-019S-H	38	PLAS-AX-022S	88	PLAS-AX-111N	87
P-1037S	47	P-1159S-CN	56	PEO-001S	261	PFRS-020S	38	PLAS-AX-024N	88	PLAS-AX-112N	87
P-1038N	52	P-1161S-CN	58	PEO-002S	261	PFRS-021S	38	PLAS-AX-024S	88	PLAS-AX-113N	88
P-1038S	52	P-1162S-CN	49	PEO-003S	261	PFRS-022S	38	PLAS-AX-025N	88	PLAS-AX-114N	87
P-1039S	47	P-1168S-CN	55	PEO-004S	261	PFRS-023S	38	PLAS-AX-025S	88	PLAS-AZ-001N	88
P-1040S	56	P-1272N	50	PEO-005S	261	PFRS-024S	38	PLAS-AX-026N	88	PLAS-AZ-001S	88
P-1041N	48	P-1272S	50	PEO-006S	261	PFRS-025S	38	PLAS-AX-026S	88	PLAS-BA-001N	88
P-1041S	48	PC-001S	19	PEO-007S	261	PFRS-026S	38	PLAS-AX-027N	88	PLAS-BA-001S	88
P-1043S	56	PC-002S	19	PEO-008S	261	PFRS-027S	38	PLAS-AX-027S	88	PLAS-BA-002N	88
P-1044N	56	PCB-DUTCH7	11	PEO-009S	261	PFRS-028S	38	PLAS-AX-028N	88	PLAS-BA-002S-DMO	88
P-1044S	56	PCB-DUTCH7-SET	11	PEO-010S	261	PFRS-029S	38	PLAS-AX-028S	88	PLAS-CA-001N	89
P-1045S-A	58	PCB-SIM	15	PEO-011S	261	PFRS-030S	38	PLAS-AX-030N	88	PLAS-CA-001S	89
P-1046S	58	PCB-SIM-PAK	15	PEO-012S	261	PHTH-012N	80	PLAS-AX-030S	88	PLAS-CA-002N	89
P-1047N	58	PCB-W22	245, 12	PEO-013S	261	PHTH-012S	80	PLAS-AX-031N	88	PLAS-CA-002S	89
P-1047S	58	PCB-W22-PAK	245, 12	PEO-014S	261	PHTH-013N	80	PLAS-AX-031S	88	PLAS-CA-003N	89
P-1048N	47	PCB-W22-SET	245, 12	PEO-015S-IS	261	PHTH-013S	80	PLAS-AX-032N	87	PLAS-CA-003S	89
P-1048S	47	PE-ALTB-ASL-1	364	PEO-016S	261	PHTH-014N	80	PLAS-AX-033N	88	PLAS-CA-004N	89
P-1050S-0.1X	55	PE-ALTB-ASL-5	364	PEO-017S	261	PHTH-014S	80	PLAS-AX-033S	88	PLAS-CA-004S	89
P-1051S-0.1X	58	PE-ALTINTA-ASL-1	364	PEO-018S	261	PHTH-015N	80	PLAS-AX-034N	88	PLAS-CA-005N	89
P-1052N	54	PE-ALTINTA-ASL-5	364	PE-QC7-ASL-1	367	PHTH-015S	80	PLAS-AX-034S	88	PLAS-CA-005S	89
P-1052S-D	54	PE-ANAB-ASL-1	364	PE-QC7-ASL-5	367	PHTH-016N	80	PLAS-AX-038N	88	PLAS-CA-006N	89
P-1053N	56	PE-ANAB-ASL-5	364	PE-QC21-ASL-1	367	PHTH-016S	80	PLAS-AX-038S	88	PLAS-CA-006S	89
P-1053S-A	56	PE-CAL1-ASL-1	364	PE-QC21-ASL-5	367	PHTH-017N	80	PLAS-AX-041N	87	PLAS-CAL-001	91
P-1054N	50	PE-CAL1-ASL-5	364	PE-SDWA1-ASL-1-SET	367	PHTH-017S	80	PLAS-AX-041S	87	PLAS-CAL-001-PAK	91
P-1054S	50	PE-CAL2-ASL-1	364	PE-SDWA1-ASL-5-SET	367	PHTH-018N	78	PLAS-AX-044N	87	PLAS-CAL-002-1	91
P-1055N	61	PE-CAL2-ASL-5	364	PE-SDWA2-ASL-1	367	PHTH-018S	78	PLAS-AX-044S	87	PLAS-CAL-002-2	91
P-1055S	61	PE-CAL3-ASL-1	364	PE-SDWA2-ASL-5	367	PHTH-019N	78	PLAS-AX-045N	88	PLAS-CAL-002-3	91
P-1056S	54	PE-CAL3-ASL-5	364	PE-SENS-ASL-1	367	PHTH-019S	78	PLAS-AX-045S	88	PLAS-CAL-002-4	91
P-1057S-A	52	PE-CAL4-ASL-1	364	PE-SENS-ASL-5	367	PHTH-020N	78	PLAS-AX-046N	88	PLAS-CAL-002-5	91
P-1059S	48	PE-CAL4-ASL-5	364	PE-SETUP1-ASL-1	367	PHTH-020S	78	PLAS-AX-046S	88	PLAS-CAL-002-6	91
P-1060N	60	PE-CAL5-ASL-1	364	PE-SETUP1-ASL-5	367	PHTH-021N	78	PLAS-AX-047N	87	PLAS-CAL-002-7	91
P-1060S	60	PE-CAL5-ASL-5	364	PE-SETUP2-ASL-1	367	PHTH-021S	78	PLAS-AX-047S	87	PLAS-CL-001N	89
P-1061N	59	PE-CAL6-ASL-1	364	PE-SETUP2-ASL-5	367	PHTH-D4-001S	79, 91	PLAS-AX-048N	88	PLAS-CL-001S	89
P-1061S	59	PE-CAL6-ASL-5	364	PE-SMTUNE2-ASL-1	367	PHTH-D4-002S	79, 91	PLAS-AX-048S	88	PLAS-CL-002N	89
P-1062N	56	PE-CAL7-ASL-1	364	PE-SMTUNE2-ASL-5	367	PHTH-D4-003S	79, 91	PLAS-AX-050N	88	PLAS-CL-002S	89
P-1062S	56	PE-CAL7-ASL-5	364	PE-SMTUNE-ASL-1	367	PHTH-D4-004S	79, 91	PLAS-AX-050S	88	PLAS-CL-003N	89
P-1063N	55	PE-CHK1-ASL-1	365	PE-SMTUNE-ASL-5	367	PHTH-D4-005S	79, 91	PLAS-AX-051N	88	PLAS-CL-003S	89
P-1063S	55	PE-CHK1-ASL-5	365	PE-SPIKE1-ASL-1	367	PHTH-D4-006S	79, 91	PLAS-AX-051S	88	PLAS-CL-004N	89
P-1064N	51	PE-CHK3-ASL-1	365	PE-SPIKE1-ASL-5	367	PHTH-D4-007S	79, 91	PLAS-AX-054N	87	PLAS-CL-004S	89
P-1064S-A	51	PE-CHK3-ASL-5	365	PE-SPIKE2-ASL-1	367	PHTH-D4-008S	79, 91	PLAS-AX-054S	87	PLAS-CL-005N	89
P-1065N-5MG	50	PE-CHK4-ASL-1	365	PE-SPIKE2-ASL-5	367	PHTH-D4-009S	79, 91	PLAS-AX-057N	87	PLAS-CL-005S	89
P-1065S-A	50	PE-CHK4-ASL-5	365	PE-SPIKE3-ASL-1	367	PHTH-D4-010S	79, 91	PLAS-AX-057S	87	PLAS-CL-006N	89
P-1066S	58	PE-CHK5-ASL-1	365	PE-SPIKE3-ASL-5	367	PHTH-D4-011S	79, 91	PLAS-AX-058N	88	PLAS-CL-006S-D	89
P-1068N	59	PE-CHK5-ASL-5	365	PE-SPIKE-ASL-1	367	PHTH-D4N-SET	79, 91	PLAS-AX-058S	88	PLAS-CL-007N	89
P-1068S-W	59	PE-CRDL1-ASL-1	364	PE-SPIKE-ASL-5	367	PHTH-D4S-SET	79, 91	PLAS-AX-059N	88	PLAS-CL-007S	89
P-1069N	50	PE-CRDL1-ASL-5	364	PES-PU-001	65	PLAS-AC-001N	87	PLAS-AX-059S	88	PLAS-CRC-BOOK2	86
P-1069S	50	PE-CRDL2-ASL-1	364	PES-PU-001-PAK	65	PLAS-AC-001S	87	PLAS-AX-060N	88	PLAS-IS-001	91
P-1070N	53	PE-CRDL2-ASL-5	364	PES-PU-SS	65	PLAS-AC-002N	87	PLAS-AX-060S-T	88	PLAS-IS-001-PAK	91
P-1070S	53	PE-CRDL3-ASL-1	364	PES-PU-SS-PAK	65	PLAS-AC-002S	87	PLAS-AX-061N	88	PLAS-PA-001N	90
P-1071N	50	PE-CRDL3-ASL-5	364	PE-STAB-ASL-1	368	PLAS-AC-003N	87	PLAS-AX-061S	88	PLAS-PA-001S	90
P-1074N	50	PE-ICS5-ASL-1	365	PE-STAB-ASL-5	368	PLAS-AC-003S	87	PLAS-AX-063N	88	PLAS-PA-002N	90
P-1074S	50	PE-ICS5-ASL-5	365	PE-TUNSOL-ASL-1	368	PLAS-AC-004N	87	PLAS-AX-063S	88	PLAS-PL-001N	90
P-1075N	52	PE-ICS18-ASL-1-SET	365	PE-TUNSOL-ASL-5	368	PLAS-AC-004S	87	PLAS-AX-069N	88	PLAS-PL-001S	90
P-1075S	52	PE-ICS18-ASL-5-SET	365	PE-UV-ASL-1	368	PLAS-AC-005N	87	PLAS-AX-069S	88	PLAS-PL-002N	90
P-1076N	49	PE-INTA-ASL-1	365	PE-UV-ASL-5	368	PLAS-AC-005S-A	87	PLAS-AX-070N	88	PLAS-PL-002S	90
P-1076S	49	PE-INTA-ASL-5	365	PE-VER1-ASL-1	368	PLAS-AC-006N	87	PLAS-AX-070S	88	PLAS-PL-003N	90
P-1077N	60	PE-INT-ASL-1	365	PE-VER1-ASL-5	368	PLAS-AC-006S	87	PLAS-AX-074N	88	PLAS-PL-003S	90
P-1077S-CN	60	PE-INT-ASL-5	365	PE-VER2-ASL-R1-1	368	PLAS-AC-007N	87	PLAS-AX-074S	88	PLAS-PL-004N	90
P-1078N	60	PE-INTFR1-ASL-1	365	PE-VER2-ASL-R1-5	368	PLAS-AD-001N	87	PLAS-AX-076N	88	PLAS-PL-004S	90
P-1078S	60	PE-INTFR1-ASL-5	365	PE-VISWAVE-ASL-1	368	PLAS-AD-001S	87	PLAS-AX-076S	88	PLAS-PL-005N	90
P-1079N	50	PE-INTFR2-ASL-1	365	PE-VISWAVE-ASL-5	368	PLAS-AD-002N	87	PLAS-AX-077N	87	PLAS-PL-005S	90
P-1079S	50	PE-INTFR2-ASL-5	365	PE-WPAM1-ASL-1	368	PLAS-AD-002S	87	PLAS-AX-077S	87	PLAS-PL-007N	90
P-1080N	48	PE-INTFRA-ASL-1	365	PE-WPAM1-ASL-5	368	PLAS-AD-003N	87	PLAS-AX-078N	88	PLAS-PL-007S	90
P-1080S	48	PE-INTFRA-ASL-5	365	PE-WPAM3-ASL-1	368	PLAS-AD-003S	87	PLAS-AX-078S	88	PLAS-PL-008N	90
P-1081N	59	PE-INTFRB-ASL-1	365	PE-WPAM3-ASL-5	368	PLAS-AF-001N	87	PLAS-AX-079N	88	PLAS-PL-008S	90
P-1081S	59	PE-INTFRB-ASL-5	365	PE-WPTM1-ASL-1-SET	368	PLAS-AF-001S	87	PLAS-AX-080N	88	PLAS-PL-009N	90
P-1085N	63	PE-INTFRC-ASL-1-SET	365	PE-WPTM1-ASL-5-SET	368	PLAS-AX-001N	88	PLAS-AX-080S	88	PLAS-PL-009S	90
P-1085S	63	PE-INTFRC-ASL-5-SET	365	PE-WPTM2-ASL-1	368	PLAS-AX-001S	88	PLAS-AX-082N	87	PLAS-PL-011N	90
P-1087S-CN	51	PE-MCS1-ASL-1	366	PE-WPTM2-ASL-5	368	PLAS-AX-002N	88	PLAS-AX-082S	87	PLAS-PL-011S	90
P-1089S-CN	55	PE-MCS1-ASL-5	366	PE-WPTM3-ASL-1	368	PLAS-AX-002S	88	PLAS-AX-084N	87	PLAS-PL-013N	90
P-1090S-CN	56	PE-MCS2-ASL-1	366	PE-WPTM3-ASL-5	368	PLAS-AX-003N	88	PLAS-AX-084S	87	PLAS-PL-013S	90
P-1092S-CN	63	PE-MCS2-ASL-5	366	PFOA-001S	107	PLAS-AX-003S	88	PLAS-AX-085N	87	PLAS-PL-014N	90
P-1093S-CN	60	PE-MCS3-ASL-1	366	PFOS-001S	107	PLAS-AX-005N	87	PLAS-AX-085S	87	PLAS-PL-014S	90
P-1094S	54	PE-MCS3-ASL-5	366	PFOS-002N	107	PLAS-AX-005S	87	PLAS-AX-086N	87	PLAS-PL-015N	90
P-1095S-CN	54	PE-MCS4-ASL-1	366	PFOS-002S	107	PLAS-AX-008N	88	PLAS-AX-086S	87	PLAS-PL-015S	90
P-1096N	56	PE-MCS4-ASL-5	366	PFOS-SCG-001S	107	PLAS-AX-008S	88	PLAS-AX-087N	87	PLAS-PL-016N	90
P-1100S-CN	52	PE-MCS5-ASL-1	366	PFOS-SCG-002S	107	PLAS-AX-012N	87	PLAS-AX-088N	87	PLAS-PL-016S	90
P-1109N	61	PE-MCS5-ASL-5	366	PFRS-001S	38	PLAS-AX-012S	87	PLAS-AX-089N	87	PLAS-PL-017N	90
P-1109S-CN	61	PE-MCS-ASL-1	366	PFRS-002S	38	PLAS-AX-013N	87	PLAS-AX-090N	87	PLAS-PL-017S	90
P-1115S-CN	53	PE-MCS-ASL-5	366	PFRS-003S	38	PLAS-AX-013S	87	PLAS-AX-091N	87	PLAS-PL-018N	90
P-1124N	54	PE-MECAL1-ASL-1	366	PFRS-004S	38	PLAS-AX-014N	88	PLAS-AX-092N	87	PLAS-PL-018S	90
P-1124S-CN	54	PE-MECAL1-ASL-5	366	PFRS-005S	38	PLAS-AX-014S	88	PLAS-AX-093N	87	PLAS-PL-019N	90
P-1131S-CN	58	PE-MECAL2-ASL-1	366	PFRS-006S	38	PLAS-AX-016N	88	PLAS-AX-094N	87	PLAS-PL-019S	90
P-1135S-CN	50	PE-MECAL2-ASL-5	366	PFRS-007S	38	PLAS-AX-016S	88	PLAS-AX-095N	88	PLAS-PL-020N	90
P-1136S-CN	53	PE-MECAL3-ASL-1-SET	366	PFRS-008S	38	PLAS-AX-017N	88	PLAS-AX-096N	87	PLAS-PL-020S	90
P-1137S-CN	59	PE-MECAL3-ASL-5-SET	366	PFRS-009S	38	PLAS-AX-017S	88	PLAS-AX-097N	88	PLAS-PL-021N	90
P-1139S-CN	59	PE-MECAL4-ASL-1	366	PFRS-010S	38	PLAS-AX-018N	88	PLAS-AX-098N	88	PLAS-PL-021S	90

Catalog Number Index

PLAS-PL-022N	90	PLAS-UV-013N	91	R-017S	44	R-082N	43	RAC-19-10X	76, 106	SDF-30X-20ML-PAK	268
PLAS-PL-022S	90	PLAS-UV-013S-CN	91	R-018N	44	R-082S	43	RAC-19-EA-0.1X-10ML	106	SDF-30X-100ML	268
PLAS-PL-024N	90	PLAS-UV-014N	91	R-018S	44	R-083N	43, 44	RAC-20	76, 106	SDF-50X-20ML-PAK	268
PLAS-PL-024S	90	PLAS-UV-014S-CN	91	R-020N	42	R-083S	43, 44	RAC-20-10X	76, 106	SDF-50X-100ML	268
PLAS-PL-025N	90	PLAS-UV-015N	91	R-020S	42	R-084N	43	RAC-20-EA-0.1X-10ML	106	SDF-70X-20ML-PAK	268
PLAS-PL-025S	90	PLAS-UV-015S-CN	91	R-022N	42	R-084S	43	RAC-21	74, 106	SDF-70X-100ML	268
PLAS-PL-026N	90	PLAS-UV-STAB-SET	91	R-022S	42	R-085N-10MG	42	RAC-21-10X	74, 106	SDF-100X-20ML-PAK	268
PLAS-PL-026S	90	PLAS-VA-001N	91	R-024N	42	R-085S	42	RAC-21-EA-0.1X-10ML	106	SDF-100X-100ML	268
PLAS-PL-027N	90	PLAS-VA-002N	91	R-024S	42	R-086N	44	RAC-22	74, 106	SDF-150X-20ML-PAK	268
PLAS-PL-027S	90	PS-71C	111	R-025N	42, 44	R-086S	44	RAC-22-10X	74, 106	SDF-150X-100ML	268
PLAS-PL-028N	90	PS-84C-1ML	111	R-025S	42, 44	R-087N	44	RAC-22-EA-0.1X-10ML	106	SDF-200X-20ML-PAK	268
PLAS-PL-028S	90	PS-111C-R1-SET	109	R-026N	42	R-087S	44	RAC-23	74, 106	SDF-200X-100ML	268
PLAS-PL-029N	90	PS-121C-R1-SET	109	R-026S	42	R-088N	44	RAC-23-10X	74, 106	SDF-300X-20ML-PAK	268
PLAS-PL-029S	90	PS-131C-R1-SET	109	R-027N	42	R-088S	44	RAC-23-EA-0.1X-10ML	106	SDF-300X-100ML	268
PLAS-PL-030N	90	PS-151C-SET	110	R-027S	42	R-089N	44	RAC-24	75, 106	SDF-400X-20ML-PAK	268
PLAS-PL-030S	90	PS-160C-R1-SET	110	R-028N	42	R-089S	44	RAC-24-10X	75, 106	SDF-400X-100ML	268
PLAS-PL-031N	90	PS-171D-R1-SET	111	R-028S	42	R-090N	44	RAC-24-EA-0.1X-10ML	106	SDF-500X-20ML-PAK	268
PLAS-PL-031S	90	PS-211C-R1-SET	110	R-029N	42	R-090S	44	RAC-IS	76, 106	SDF-500X-100ML	268
PLAS-PL-032N	90	PS-231C-R1-SET	110	R-029S	42	R-091N	44	RAC-IS-EA	76, 106	SDF-600X-20ML-PAK	268
PLAS-PL-032S	90	PS-241D-R1-SET	110	R-030N	42	R-091S	44	RAC-R1-10X-SET	106	SDF-600X-100ML	268
PLAS-PL-033N	90	PS-251C-R1-SET	109	R-030S	42	R-092N	44	RAC-R1-SET	106	SDF-BL-20ML-PAK	268
PLAS-PL-033S	90	PS-255C-R1-SET	109	R-031N	42	R-092S	44	RFA-BLNK-10ML	277, 286	SDF-BL-100ML	268
PLAS-PL-035N	90	PS-261C-R1-SET	110	R-031S	42	R-093N	43	RFA-BLNK-10ML-PAK	277, 286	SDF-CAL-20ML-SET	268
PLAS-PL-036N	90	PS-281C-R1-SET	110	R-032N	42	R-093S	43	RGS-001	255, 312	SDF-CAL-100ML-SET	268
PLAS-PL-036S-D	90	PS-411C-R1-SET	109	R-032S	42	R-094N	42	RRO-AK-103AA	315	SDWA-01-1	346
PLAS-PL-037N	90	PS-421D-R1-SET	109	R-033S	42	R-094S	42	RRO-AK-103AA-PAK	315	SDWA-01-5	346
PLAS-PL-037S-D	90	PS-450E-R2-SET	110	R-045N	42	R-095N	43	RRO-AK-103-LCS	315	SDWA-1-SET	346
PLAS-PL-038N	90	PS-510D-R1-SET	111	R-045S	42	R-095S	43	RRO-AK-103-LCS-5X	315	SDWA-02-1	346
PLAS-PL-038S	90	PS-520E-R1-SET	111	R-047N	42	R-096N	43	RRO-AK-103-LCS-5X-PAK	315	SDWA-02-5	346
PLAS-PL-053N	90	PS-590D-R1-SET	111	R-047S	42	R-096S	43	RRO-AK-103-LCS-PAK	315	SDWA-03-1	346
PLAS-PL-059N	90	PS-621C-R1-SET	111	R-048N	42, 44	R-097N	42	RRO-AK-103-RCS	315	SDWA-03-5	346
PLAS-PL-060N	90	PS-651C-R1-SET	111	R-048S	42, 44	R-097S	42	RRO-AK-103-RCS-10X	315	SDWA-04-1	346
PLAS-PL-061N	90	PS-670CX-R1-SET	111	R-049N	42, 44	R-098N	42	RRO-AK-103-RCS-10X-PAK	315	SDWA-04-5	346
PLAS-PL-062N	90	PS-710C-R1-SET	111	R-049S	42, 44	R-098S	42	RRO-AK-103-RCS-PAK	315	SDWA-05-1	346
PLAS-PL-063N	90	PS-840C-R1-SET	111	R-050N	42, 44	R-099N	42	RRO-AK-103-SS	315	SDWA-05-5	346
PLAS-PL-064N	90	PS-920CX-R1-SET	109	R-050S	42, 44	R-099S	42	RRO-AK-103-SS2	315	SDWA-5-SET	346
PLAS-PL-065N	90	PS-960C-R1-SET	110	R-051N	42, 44, 73	R-105N	42	RRO-AK-103-SS2-PAK	315	SDWA-06-MS-1	346
PLAS-PL-066N	90	PS-970C-R1-SET	111	R-051S	42, 44, 73	R-105S	42	RRO-AK-103-SS-PAK	315	SDWA-06-MS-5	346
PLAS-PL-067N	89	PS-CP-01-1ML	109, 111	R-052N	42, 44	R-115N	42			SDWA-07-1	346
PLAS-PL-068N	90	PS-CP-02-1ML	109	R-052S	42, 44	R-115S	42			SDWA-07-5	346
PLAS-PL-069N	90	PS-CP-03-1ML	109	R-053S	42, 44	RAC-01	74, 106			SDWA-08-1	346
PLAS-PL-070N	90	PS-CP-04-1ML	109	R-054N	42, 76	RAC-01-10X	74, 106			SDWA-08-5	346
PLAS-PL-071N	90	PS-CP-05A-1ML	109	R-054S	42, 76	RAC-01-EA-0.1X-10ML	106			SDWA-09-1	346
PLAS-PL-072N	90	PS-CP-06A-1ML	109	R-055N	42	RAC-02	74, 106			SDWA-09-5	346
PLAS-PL-074N	90			R-055S	42, 76	RAC-02-10X	74, 106			SFA-001N	94
PLAS-PL-074S	90			R-056N	42	RAC-02-EA-0.1X-10ML	106			SFA-001S	94
PLAS-RT-001N	90			R-056S	42, 76	RAC-03	74, 106			SFA-002N	94
PLAS-RT-001S	90			R-057N	42, 73	RAC-03-10X	74, 106			SFA-002S	94
PLAS-RT-002N	90	QCS-01-1	344, 356	R-057S	42, 73	RAC-03-EA-0.1X-10ML	106			SFA-003N	94
PLAS-RT-002S	90	QCS-01-5	344, 356	R-058N	43	RAC-04	75, 106			SFA-003S	94
PLAS-RT-003N	90	QCS-1-SET	344	R-058S	43	RAC-04-10X	75, 106			SFA-004N	94
PLAS-RT-004N	90	QCS-02-1	344, 356	R-059N	43	RAC-04-EA-0.1X-10ML	106			SFA-004S	94
PLAS-RT-004S	90	QCS-02-5	344, 356	R-059S	43	RAC-05	75, 106			SFA-005N	94
PLAS-RT-005N	90	QCS-02-R1-1	344, 356	R-060N	43	RAC-05-10X	75, 106			SFA-005S	94
PLAS-RT-005S	90	QCS-02-R1-5	344, 356	R-060S	43	RAC-05-EA-0.1X-10ML	106			SFA-006N	94
PLAS-RT-006N	90	QCS-03-1	344	R-061N	43	RAC-06	75, 106			SFA-006S	94
PLAS-RT-006S	90	QCS-03-5	344	R-061S	43	RAC-06-10X	75, 106			SFA-007N	94
PLAS-RT-007N	90	QCS-04-1	344	R-062N	43, 74	RAC-06-EA-0.1X-10ML	106			SFA-007S	94
PLAS-RT-007S	90	QCS-05-1	344	R-062S	43, 74	RAC-07	75, 106			SFA-008N	94
PLAS-RT-008N	90	QCS-5-SET	344	R-063N	43, 74	RAC-07-10X	75, 106			SFA-008S	94
PLAS-RT-008S	90	QCS-06-1	344	R-063S	43, 74	RAC-07-EA-0.1X-10ML	106			SFA-009N	94
PLAS-RT-009N	90	QCS-ASL-7-1	344	R-065N	43	RAC-08	75, 248, 106			SFA-009S	94
PLAS-RT-010N	90	QCS-ASL-7-5	344	R-065S	43	RAC-08-10X	75, 106			SFA-010N	94
PLAS-RT-010S	90	QCS-ASL-19-1	344	R-066N	43	RAC-08-EA-0.1X-10ML	106			SFA-010S	94
PLAS-RT-011N	90	QCS-ASL-19-5	344	R-066S	43	RAC-09	75, 106			SFA-011N	94
PLAS-ST-001N	91	QCS-ASL-21-1	344	R-067N	43	RAC-09-10X	75, 106			SFA-011S	94
PLAS-ST-001S	91	QCS-ASL-21-5	344	R-067S	43	RAC-09-EA-0.1X-10ML	106			SFA-012N	94
PLAS-ST-002N	91	QCS-R1-1-SET	344	R-068N	43	RAC-10	75, 106			SFA-012S	94
PLAS-ST-002S	91	QCS-R1-5-SET	344	R-068S	43	RAC-10-10X	75, 106			SFA-013N	94
Plasthall® D1NP	90			R-069N	43	RAC-10-EA-0.1X-10ML	106			SFA-013S	94
Plasthall® ESO	90			R-069S	43	RAC-11	75, 106			SFA-014N	94
PLAS-UV-001N	91			R-070N	43	RAC-11-10X	75, 106			SFA-014S	94
PLAS-UV-001S	91	R-001N	42	R-070S	43	RAC-11-EA-0.1X-10ML	106			SFA-015N	94
PLAS-UV-002N	91	R-001S	42	R-071N	43	RAC-12	75, 106			SFA-015S	94
PLAS-UV-002S	91	R-003N	42	R-071S	43	RAC-12-10X	75, 228, 106			SFA-016N	94
PLAS-UV-003N	91	R-003S	42	R-072N	43	RAC-12-EA-0.1X-10ML	106			SFA-016S	94
PLAS-UV-003S	91	R-004S	42	R-072S	43	RAC-13	75, 106			SFA-017N	94
PLAS-UV-004N	91	R-005N	42, 44	R-073N	43	RAC-13-10X	75, 106			SFA-017S	94
PLAS-UV-004S	91	R-005S	42, 44	R-073S	43	RAC-13-EA-0.1X-10ML	106			SFA-018N	94
PLAS-UV-005N	91	R-006N	42, 44	R-074N	43, 75	RAC-14	75, 106			SFA-018S	94
PLAS-UV-005S	91	R-006S	42, 44	R-074S	43, 75	RAC-14-10X	75, 106			SFA-N-SET	94, 111
PLAS-UV-006N	91	R-007N	42, 44	R-075N	43, 75	RAC-14-EA-0.1X-10ML	106			SFA-S-SET	94
PLAS-UV-006S-CN	91	R-007S	42, 44	R-075S	43, 75	RAC-15	75, 106			SGT-HEM	324
PLAS-UV-007N	91	R-008N	42	R-076N	43, 75	RAC-15-10X	75, 106			SIC-1-SET	355
PLAS-UV-007S-CN	91	R-008S	42	R-076S	43, 75	RAC-15-EA-0.1X-10ML	106			SIC-5-SET	355
PLAS-UV-008N	91	R-009N	23	R-077N	43, 75	RAC-16	75, 106			SICS-01-1	355
PLAS-UV-008S-CN	91	R-009S	23	R-077S	43, 75	RAC-16-10X	75, 106			SICS-01-5	355
PLAS-UV-009N	91	R-010N	42	R-078N	43, 75	RAC-16-EA-0.1X-10ML	106			SICS-02-1	355
PLAS-UV-009S-CN	91	R-010S	42	R-078S	43, 75	RAC-17	76, 106			SICS-02-5	355
PLAS-UV-010N	91	R-013N	42	R-079N	43, 75	RAC-17-10X	76, 106			SICS-03-1	355
PLAS-UV-010S-CN	91	R-013S	42	R-079S	43, 75	RAC-17-EA-0.1X-10ML	106			SICS-03-5	355
PLAS-UV-011N	91	R-016N	42	R-080N	43, 75	RAC-18	76, 106			SIC-SING-1-SET	355
PLAS-UV-011S-CN	91	R-016S	42	R-080S	43, 75	RAC-18-10X	76, 106			SIC-SING-R1-SET	357
PLAS-UV-012N	91	R-017N	44	R-081N	43, 44	RAC-18-EA-0.1X-10ML	106			SK-1X-20ML-PAK	268
PLAS-UV-012S-CN	91			R-081S	43, 44	RAC-19	76, 106			SK-1X-100ML	268

S

S-006	116	SDWA-08-5	346
S-006-20X	116	SDWA-09-1	346
S-078	77, 171	SDWA-09-5	346
S-078-10X	77, 171	SFA-001N	94
S-163	67, 116	SFA-001S	94
S-168A	198	SFA-002N	94
S-168-MIXA-R1	198	SFA-002S	94
S-168-MIXB	198	SFA-003N	94
S-168-R1-SET	198	SFA-003S	94
S-181M	198	SFA-004N	94
S-279	70	SFA-004S	94
S-279-5X	70	SFA-005N	94
S-354-2	69, 220	SFA-005S	94
S-406A	67, 115	SFA-006N	94
S-406A-10X	67, 115	SFA-006S	94
S-410	71, 115	SFA-007N	94
S421	60	SFA-007S	94
S-457S	70	SFA-008N	94
S-457S-10X	70	SFA-008S	94
S-532-ASL	170	SFA-009N	94
S-532-ASL-PAK	170	SFA-009S	94
S-603A-10X	312, 322	SFA-010N	94
S-603A-10X-PAK	312, 322	SFA-010S	94
S-989	143, 256	SFA-011N	94
S-1019	77, 123	SFA-011S	94
S-1275-1-03	71	SFA-012N	94
S-1321B	70, 124	SFA-012S	94
SBPT-LSGAS-VAP	281	SFA-013N	94
SCO-10X-100ML	270	SFA-013S	94
SCO-25X-100ML	270	SFA-014N	94
SCO-50X-100ML	270	SFA-014S	94
SCO-100X-100ML	270	SFA-015N	94
SCO-200X-100ML	270	SFA-015S	94
SCO-300X-100ML	270	SFA-016N	94
SCO-400X-100ML	270	SFA-016S	94
SCO-500X-100ML	270	SFA-017N	94
SCO-CAL-100ML-SET	270	SFA-017S	94
SDF-1X-20ML-PAK	268	SFA-018N	94
SDF-1X-100ML	268	SFA-018S	94
SDF-2X-20ML-PAK	268	SFA-N-SET	94, 111
SDF-2X-100ML	268	SFA-S-SET	94
SDF-3X-20ML-PAK	268	SGT-HEM	324
SDF-3X-100ML	268	SIC-1-SET	355
SDF-4X-20ML-PAK	268	SIC-5-SET	355
SDF-4X-100ML	268	SICS-01-1	355
SDF-5X-20ML-PAK	268	SICS-01-5	355
SDF-5X-100ML	268	SICS-02-1	355
SDF-75X-20ML-PAK	268	SICS-02-5	355
SDF-75X-100ML	268	SICS-03-1	355
SDF-10X-20ML-PAK	268	SICS-03-5	355
SDF-10X-100ML	268	SIC-SING-1-SET	355
SDF-15X-20ML-PAK	268	SIC-SING-R-1-SET	357
SDF-15X-100ML	268	SK-1X-20ML-PAK	268
		SK-1X-100ML	268

Catalog Number Index

SK-3X-20ML-PAK	268	SWMO-200X-20ML-PAK	268	TCLP-PES-1/2-SET	181	UFA-032N	93	VIT-007N	97	WM-21-NMS-3X-1	378
SK-3X-100ML	268	SWMO-200X-100ML	268	TCLP-PES-1-PAK	181	UFA-032S	93	VIT-008N	97	WM-21-NMS-5X-1	378
SK-5X-20ML-PAK	268	SWMO-300X-20ML-PAK	268	TCLP-PES-1-QC	182	UFA-033N	93	VIT-009N-R1	97	WM-21-NMS-10X-1	378
SK-5X-100ML	268	SWMO-300X-100ML	268	TCLP-PES-1-QC-PAK	182	UFA-033S	93	VIT-010N-R1	97	WM-21-NMS-30X-1	378
SK-75X-20ML-PAK	268	SWMO-400X-20ML-PAK	268	TCLP-PES-2	181	UFA-N-SET	93	VIT-012N	97	WM-21-NMS-50X-1	378
SK-75X-100ML	268	SWMO-400X-100ML	268	TCLP-PES-2-PAK	181	UFA-S-SET	93	VIT-013N	97	WM-22-1X-100G	376
SK-10X-20ML-PAK	268	SWMO-500X-20ML-PAK	268	TCLP-PES-2-QC	182	UG-001N	94	VIT-014N	97	WM-22-1X-200G	376
SK-10X-100ML	268	SWMO-500X-100ML	268	TCLP-PES-2-QC-PAK	182	UG-002N	94	VIT-015N	97	WM-22-3X-100G	376
SK-20X-20ML-PAK	268	SWMO-600X-20ML-PAK	268	TCLP-PES-PAK	181	UG-003N	94	VIT-016N	97	WM-22-3X-200G	376
SK-20X-100ML	268	SWMO-600X-100ML	268	TCLP-QC	182	UG-004N	94	VIT-017N	97	WM-22-5X-100G	376
SK-30X-20ML-PAK	268	SWMO-BL-20ML-PAK	268	TCLP-QC-PAK	182	UG-005N	94	VIT-018N	97	WM-22-5X-100G	376
SK-30X-100ML	268	SWMO-BL-100ML	268	TCLP-VOC	181	UG-006N	94	VIT-019N	97	WM-22-10X-200G	376
SK-40X-20ML-PAK	268	SWMO-CAL-100ML-SET	268	TELE-CHK1-ASL-1-SET	369	UG-007N	94	VIT-020N	97	WM-22-10X-200G	376
SK-40X-100ML	268	SWMO-LT-1X-20ML-PAK	268	TELE-CHK1-ASL-5-SET	369	UG-008N	94	VIT-022N	97	WM-22-30X-100G	376
SK-50X-20ML-PAK	268	SWMO-LT-1X-100ML	268	TELE-CHK2-ASL-1-SET	369	UG-009N	94	VPH-WA	320	WM-22-30X-200G	376
SK-50X-100ML	268	SWMO-LT-2X-20ML-PAK	268	TELE-CHK2-ASL-5-SET	369	UG-010N	94	VPH-WA-10X	320	WM-22-50X-100G	376
SK-100X-20ML-PAK	268	SWMO-LT-2X-100ML	268	TELE-CHK3-ASL-1-SET	369	UG-011N	94	VPH-WA-10X-PAK	320	WM-22-50X-200G	376
SK-100X-100ML	268	SWMO-LT-3X-20ML-PAK	268	TELE-CHK3-ASL-5-SET	369	UG-012N	94	VPH-WA-100X	320	WM-22-90X-100G	376
SK-200X-20ML-PAK	268	SWMO-LT-3X-100ML	268	TELE-CHK4-ASL-1	369	UG-013N	94	VPH-WA-100X-PAK	320	WM-22-90X-200G	376
SK-200X-100ML	268	SWMO-LT-4X-20ML-PAK	268	TELE-CHK4-ASL-5	369	UG-014N	94	VPH-WA-MS	320	WM-22-100G-SET	376
SK-BL-20ML-PAK	268	SWMO-LT-4X-100ML	268	TELE-CHK5-ASL-1	369	UG-015N	94	VPH-WA-MS-PAK	320	WM-22-200G-SET	376
SK-BL-100ML	268	SWMO-LT-5X-20ML-PAK	268	TELE-CHK5-ASL-5	369	UG-016N	94	VPH-WA-PAK	320	WM-23-1X-100G	376
SK-CAL-100ML-SET	268	SWMO-LT-5X-100ML	268	TELE-CHK6-ASL-1	369	UG-017N	94	VPH-WA-RT	320	WM-23-1X-200G	376
SK-HD-1X-100ML	269	SWMO-LT-75X-20ML-PAK	268	TELE-CHK6-ASL-5	369	UG-018N	94	VPH-WA-RT-PAK	320	WM-23-3X-100G	376
SK-HD-2X-100ML	269	SWMO-LT-75X-100ML	268	TELE-CHK7-ASL-1	369	UG-019N	94	VPH-WA-SS-10X	320	WM-23-3X-200G	376
SK-HD-3X-100ML	269	SWMO-LT-10X-20ML-PAK	268	TELE-CHK7-ASL-5	369	UG-020N	94	VPH-WA-SS-10X-PAK	320	WM-23-5X-100G	376
SK-HD-4X-100ML	269	SWMO-LT-10X-100ML	268	TK-102-08N	68	UG-021N	94			WM-23-5X-200G	376
SK-HD-5X-100ML	269	SWMO-LT-15X-20ML-PAK	268	TK-102-08S-10X	68	UG-022N	94			WM-23-10X-100G	376
SK-HD-75X-100ML	269	SWMO-LT-15X-100ML	268	TPH-002-R1-SET	308	UG-023N	94			WM-23-10X-200G	376
SK-HD-10X-100ML	269	SWMO-LT-30X-20ML-PAK	268	TPH-003-SET	308	UG-024N	94			WM-23-30X-100G	376
SK-HD-15X-100ML	269	SWMO-LT-30X-100ML	268	TPH-004-SET	308	UG-025N	94			WM-23-30X-200G	376
SK-HD-20X-100ML	269	SWMO-LT-50X-20ML-PAK	268	TPH-006-10X	253, 310	UG-026N	94			WM-23-50X-100G	376
SK-HD-30X-100ML	269	SWMO-LT-50X-100ML	268	TPH-006-10X-PAK	253, 310	UG-027N	94			WM-23-50X-200G	376
SK-HD-40X-100ML	269	SWMO-LT-70X-20ML-PAK	268	TPH-R2-SET	308	UG-028N	94			WM-23-90X-100G	376
SK-HD-50X-100ML	269	SWMO-LT-70X-100ML	268	T-W130	16	UG-029N	94			WM-23-90X-200G	376
SK-HD-70X-100ML	269	SWMO-LT-100X-20ML-PAK	268			UG-030N	94			WM-23-100G-SET	376
SK-HD-100X-100ML	269	SWMO-LT-100X-100ML	268			UG-031N	94			WM-23-200G-SET	376
SK-HD-150X-100ML	269	SWMO-LT-150X-20ML-PAK	268			UG-032N	94			WM-75CST-01	375
SK-HD-200X-100ML	269	SWMO-LT-150X-100ML	268			UG-033N	94			WM-75CST-01-5X	375
SK-HD-300X-100ML	269	SWMO-LT-200X-20ML-PAK	268			UG-N-SET	94			WM-75CST-02	375
SK-HD-400X-100ML	269	SWMO-LT-200X-100ML	268	UFA-001N	93	UOP-M-543-PAK	302			WM-75CST-02-5X	375
SK-HD-500X-100ML	269	SWMO-LT-300X-20ML-PAK	268	UFA-001S	93	UOP-M-551-PAK	302			WM-75CST-03	375
SK-HD-600X-100ML	269	SWMO-LT-300X-100ML	268	UFA-002N	93	UOP-M-660-0.1X-PAK	302			WM-75CST-04	375
SK-HD-BL-100ML	269	SWMO-LT-400X-20ML-PAK	268	UFA-002S	93	UOP-M-660-10X-PAK	302			WM-75CST-04-5X	375
SK-HD-CAL-100ML-SET	269	SWMO-LT-400X-100ML	268	UFA-003N	93	UOP-M-660-PAK	302			WM-75CST-05	375
SQS-01-1	345	SWMO-LT-500X-20ML-PAK	268	UFA-003S	93	UOP-M-720-PAK	302			WM-75CST-06	375
SQS-03-1	345	SWMO-LT-500X-100ML	268	UFA-004N	93	UOP-M-744-PAK	302			WM-75CST-06-5X	375
SRO-35X-100ML	270	SWMO-LT-600X-20ML-PAK	268	UFA-004S	93	UOP-M-831-PAK	302			WM-75CST-07	375
SRO-70X-100ML	270	SWMO-LT-600X-100ML	268	UFA-005N	93	UOP-M-868-PAK	302			WM-75CST-07-5X	375
SRO-100X-100ML	270	SWMO-LT-BL-20ML-PAK	268	UFA-006N	93	UOP-M-931-PAK	302			WM-75CST-08	375
SRO-150X-100ML	270	SWMO-LT-BL-100ML	268	UFA-006S	93					WM-75CST-08-5X	375
SRO-200X-100ML	270	SWMO-LT-CAL-100ML-SET	268	UFA-007N	93					WM-75CST-09	375
SRO-300X-100ML	270			UFA-007S	93					WM-75CST-09-5X	375
SRO-400X-100ML	270			UFA-008N	93					WM-75CST-13	375
SRO-CAL-100ML-SET	270			UFA-008S	93	V-001	67			WM-75CST-13-5X	375
STP-1X-100ML	269			UFA-010N	93	V-002	67			WM-75CST-14	375
STP-2X-100ML	269	T-001N	19, 89	UFA-010S	93	V-003	67			WM-75CST-14-5X	375
STP-3X-100ML	269	T-002N	19, 89	UFA-011N	93	V-004	67			WM-75CST-15	375
STP-5X-100ML	269	T-003N	19, 89	UFA-011S	93	V-005	68			WM-75CST-15-5X	375
STP-10X-100ML	269	T-004S	19, 20, 19, 89	UFA-012N	93	V-006	69			WM-75CST-27	375
STP-20X-100ML	269	T-005S	19, 20, 19, 89	UFA-012S	93	V-007	69			WM-75CST-27-5X	375
STP-30X-100ML	269	T-006S	19, 20, 19, 89	UFA-014N	93	V-008	69			WM-75CST-28	375
STP-40X-100ML	269	T-432S	19, 89	UFA-014S	93	V-009	69			WM-75CST-29	375
STP-60X-100ML	269	T-440S	89	UFA-015N	93	V-010	69			WM-75CST-29-5X	375
STP-100X-100ML	269	T-442S	19, 89	UFA-015S	93	V-011	69			WM-75CST-30	375
STP-200X-100ML	269	T-460S	19	UFA-016N	93	V-012	69			WM-75CST-30-5X	375
STP-300X-100ML	269	T-6050S	19, 89	UFA-016S	93	V-013	69			WM-75CST-32	375
STP-BL-100ML	269	TCLP-01-1	347	UFA-017N	93	V-014	69			WM-75CST-32-5X	375
STP-CAL-100ML-SET	269	TCLP-01-5	347	UFA-017S	93	V-015	70			WM-75CST-33	375
SWMO-1X-20ML-PAK	268	TCLP-02-1	347, 353, 356	UFA-018N	93	V-016	70			WM-75CST-33-5X	375
SWMO-2X-20ML-PAK	268	TCLP-02-5	347, 353, 356	UFA-018S	93	V-017	69			WM-75CST-34	375
SWMO-3X-20ML-PAK	268	TCLP-A	181	UFA-019N	93	V-018	69			WM-75CST-35	375
SWMO-3X-100ML	268	TCLP-A-PAK	181	UFA-019S	93	V-019	69			WM-75CST-35-5X	375
SWMO-4X-20ML-PAK	268	TCLP-BNA	181	UFA-020N	93	V-020	69			WM-75CST-37	375
SWMO-4X-100ML	268	TCLP-BNA-1312	182	UFA-020S	93	V-021	69			WM-75CST-37-5X	375
SWMO-5X-20ML-PAK	268	TCLP-BNA-1312-PAK	182	UFA-022N	93	V-022	70			WM-75CST-41	375
SWMO-5X-100ML	268	TCLP-BNA-QC	181	UFA-022S	93	V-023	70			WM-75CST-41-5X	375
SWMO-75X-20ML-PAK	268	TCLP-BNA-SET	181	UFA-023N	93	V-024	70			WM-75CST-43	375
SWMO-75X-100ML	268	TCLP-BN-PAK	181	UFA-024S	93	V-025	70			WM-75CST-43-5X	375
SWMO-10X-20ML-PAK	268	TCLP-GFAA-1	347	UFA-025N	93	V-026	70			WM-75CST-50	375
SWMO-10X-100ML	268	TCLP-GFAA-5	347	UFA-026N	93	V-027	70			WM-75CST-51	375
SWMO-15X-20ML-PAK	268	TCLP-HERB	181	UFA-026S	93	V-028	70			WM-75CST-52	375
SWMO-15X-100ML	268	TCLP-HERB-ME	181	UFA-027N	93	V-028S-D-10X	308, 320, 321			WM-75CST-52-5X	375
SWMO-30X-20ML-PAK	268	TCLP-HERB-ME-PAK	181	UFA-027S	93	V-029	70			WM-75CST-53	375
SWMO-30X-100ML	268	TCLP-HERB-ME-QC	182	UFA-028N	93	V-030	70			WM-75CST-53-5X	375
SWMO-50X-20ML-PAK	268	TCLP-HERB-ME-QC-PAK	182	UFA-028S	93	V-031	69			WM-75CST-54	375
SWMO-50X-100ML	268	TCLP-HERB-PFB	181	UFA-029N	93	VAR-TUN-ASL-1	361			WM-75CST-54-5X	375
SWMO-70X-20ML-PAK	268	TCLP-ICP-1	347	UFA-029S	93	VAR-TUN-ASL-5	361			WM-75CST-55	375
SWMO-100X-20ML-PAK	268	TCLP-ICP-5	347	UFA-030N	93	VIT-001N	97			WM-75CST-56	375
SWMO-100X-100ML	268	TCLP-PES	181	UFA-030S	93	VIT-002N	97			WM-75CST-56-5X	375
SWMO-150X-20ML-PAK	268	TCLP-PES-1	181	UFA-031N	93	VIT-003N	97			WM-75CST-60	375
SWMO-150X-100ML	268	TCLP-PES-1/2-QC-SET	182	UFA-031S	93	VIT-004N	97			WM-75CST-63	375
						VIT-005N	97			WM-75CST-63-5X	375
						VIT-006N	97			WM-75CST-64	375
										WM-75CST-64-5X	375

Catalog Number Index

WM-75CST-67	375	WM-NMS-52	377	Z-013-15	41, 122
WM-75CST-67-5X	375	WM-NMS-52-5X	377	Z-013-16	41
WM-75CST-69	375	WM-NMS-52-75X-25G	377	Z-013-17	41
WM-75CST-69-5X	375	WM-NMS-52-75X-50G	377	Z-013N-SET	41
WM-75CST-70	375	WM-NMS-53	377	Z-013-SET	41
WM-75CST-70-5X	375	WM-NMS-53-5X	377	Z-014A	130, 178
WM-75CST-71	375	WM-NMS-54	377	Z-014A-LC	135
WM-75CST-71-5X	375	WM-NMS-54-5X	377	Z-014A-PAK	130, 178
WM-NMS-01	377	WM-NMS-54-25X-25G	377	Z-014B	130, 178
WM-NMS-01-5X	377	WM-NMS-54-25X-50G	377	Z-014B-1	44, 67, 114
WM-NMS-01-30X-25G	377	WM-NMS-55	377	Z-014B-LC	135
WM-NMS-01-30X-50G	377	WM-NMS-55-5X	377	Z-014B-PAK	130, 178
WM-NMS-02	377	WM-NMS-55-100X-25G	377	Z-014C	131, 179
WM-NMS-02-5X	377	WM-NMS-55-100X-50G	377	Z-014C-PAK	131, 179
WM-NMS-02-20X-25G	377	WM-NMS-60	377	Z-014C-R131, 136, 179, 228, 234	
WM-NMS-02-20X-50G	377	WM-NMS-60-5X	377	Z-014C-R2	131, 174, 179
WM-NMS-03	377	WM-NMS-60-50X-25G	377	Z-014C-R2-PAK	131, 174, 179
WM-NMS-03-5X	377	WM-NMS-60-50X-50G	377	Z-014C-R-PAK	131, 136, 179, 228, 234
WM-NMS-04	377	WM-NMS-63	377	Z-014D	130, 178
WM-NMS-04-5X	377	WM-NMS-63-5X	377	Z-014D-1	115
WM-NMS-04-125X-25G	377	WM-NMS-63-75X-25G	377	Z-014D-PAK	130, 178
WM-NMS-04-125X-50G	377	WM-NMS-63-75X-50G	377	Z-014E	130, 132, 178, 225
WM-NMS-05	377	WM-NMS-64	377	Z-014E-PAK	130, 178
WM-NMS-05-5X	377	WM-NMS-64-5X	377	Z-014E-R	132, 225
WM-NMS-08	377	WM-NMS-64-50X-25G	377	Z-014E-R3	132
WM-NMS-08-5X	377	WM-NMS-64-50X-50G	377	Z-014F	130, 132, 176, 178, 225
WM-NMS-08-100X-25G	377	WM-NMS-67	377	Z-014F-2	75, 117
WM-NMS-08-100X-50G	377	WM-NMS-67-5X	377	Z-014F-PAK	130, 178
WM-NMS-09	377	WM-NMS-67-40X-25G	377	Z-014G	130, 135, 178, 244
WM-NMS-09-5X	377	WM-NMS-67-40X-50G	377	Z-014G-FL	130, 236, 255
WM-NMS-09-50X-25G	377	WM-NMS-69	377	Z-014G-PAK	130, 135, 178, 244
WM-NMS-09-50X-50G	377	WM-NMS-69-5X	377	Z-014G-R	130, 178, 215
WM-NMS-11	377	WM-NMS-69-25X-25G	377	Z-014G-R-PAK	130, 178, 215
WM-NMS-11-5X	377	WM-NMS-69-25X-50G	377	Z-014H	130, 176, 178
WM-NMS-11-50X-25G	377	WM-NMS-70	377	Z-014H-LC	135
WM-NMS-11-50X-50G	377	WM-NMS-70-5X	377	Z-014H-LC-PAK	135
WM-NMS-13	377	WM-NMS-70-60X-25G	377	Z-014H-PAK	130, 176, 178
WM-NMS-13-5X	377	WM-NMS-70-60X-50G	377	Z-014J	130, 133, 136, 177, 178, 226, 230, 231, 235
WM-NMS-13-35X-25G	377	WM-NMS-71	377	Z-014J-0.5X	135, 136
WM-NMS-13-35X-50G	377	WM-NMS-71-5X	377	Z-014J-0.5X-PAK	135, 136
WM-NMS-14	377, 378	WM-NMS-71-50X-25G	377	Z-014J-2	116
WM-NMS-14-5X	377, 378	WM-NMS-71-50X-50G	377	Z-014J-3	68, 117
WM-NMS-14-75X-25G	377	WM-STAB	375	Z-014J-3-M-0.5X	68, 117
WM-NMS-14-75X-50G	377	WPAM-01-1	347	Z-014J-4	121
WM-NMS-15	377	WPAM-01-5	347	Z-014J-PAK	130, 133, 136, 177, 178, 226, 230, 231, 235
WM-NMS-15-5X	377	WPAM-1-SET	347	Z-014K-LC	135
WM-NMS-15-60X-25G	377	WPAM-03-1	347	Z-014R-1-SET	131, 178
WM-NMS-15-60X-50G	377	WPAM-03-5	347	Z-014R-2-SET	131, 178
WM-NMS-20	377	WPAM-5-SET	347	Z-014R-3-SET	131, 178
WM-NMS-20-5X	377	WPTM-01-1	347	Z-014R-SET	131, 178
WM-NMS-22	377	WPTM-01-5	347	Z-017-SET	64
WM-NMS-27	377	WPTM-1-SET	347	Z-023-SET	64
WM-NMS-27-5X	377	WPTM-02-1	347	Z-031-SET	64
WM-NMS-27-40X-25G	377	WPTM-02-5	347		
WM-NMS-27-40X-50G	377	WPTM-03-1	347		
WM-NMS-29	377	WPTM-03-5	347		
WM-NMS-29-5X	377	WPTM-5-SET	347		
WM-NMS-29-200X-25G	377				
WM-NMS-29-200X-50G	377				
WM-NMS-30	377				
WM-NMS-30-5X	377				
WM-NMS-30-15X-25G	377				
WM-NMS-30-15X-50G	377				
WM-NMS-32	377				
WM-NMS-32-5X	377				
WM-NMS-32-30X-25G	377				
WM-NMS-32-30X-50G	377				
WM-NMS-33	377				
WM-NMS-33-5X	377				
WM-NMS-33-60X-25G	377				
WM-NMS-33-60X-50G	377				
WM-NMS-34	377				
WM-NMS-34-5X	377				
WM-NMS-35	377				
WM-NMS-35-5X	377				
WM-NMS-35-50X-25G	377				
WM-NMS-35-50X-50G	377				
WM-NMS-37	377				
WM-NMS-37-5X	377				
WM-NMS-37-50X-25G	377				
WM-NMS-37-50X-50G	377				
WM-NMS-41	377				
WM-NMS-41-5X	377				
WM-NMS-41-50X-25G	377				
WM-NMS-41-50X-50G	377				
WM-NMS-43	377				
WM-NMS-43-5X	377				
WM-NMS-43-75X-25G	377				
WM-NMS-43-75X-50G	377				
WM-NMS-44-30X-25G	377				
WM-NMS-44-30X-50G	377				
WM-NMS-51	377				
WM-NMS-51-5X	377				
WM-NMS-51-35X-25G	377				
WM-NMS-51-35X-50G	377				

X

X-001	21, 23
X-002	23
X-003	23
X-004	23
X-008	23
X-009	23
X-010	23
X-011	23
X-012	23

Z

Z-001-SET	41
Z-004-SET	64
Z-008S-H-10X-SET	16
Z-008S-H-SET	16
Z-008S-M-SET	244, 16
Z-008S-SET	244, 16
Z-009-R-SET	168
Z-013-01	41
Z-013-02	41
Z-013-03	41
Z-013-04	41
Z-013-05	41
Z-013-06	41
Z-013-07	41
Z-013-08	41
Z-013-09	41
Z-013-10	41
Z-013-11	41
Z-013-12	41
Z-013-13	41
Z-013-14	41

Custom Services

Custom Synthesis

The AccuStandard Synthesis Department employs several PhD. Organic Chemists with many years of pertinent academic and industrial experience. The experienced staff has developed hundreds of pure chemical compounds for companies and governmental agencies around the world. The very well-equipped synthetic laboratory, with significant analytical support has made many notable synthesis projects possible. We specialize in synthesizing chemicals of high purity to be used as reference standards, and also offer custom synthesis capability on milligram to kilogram scales.



Analytical Capabilities

- GC-MS, GC-FID, GC-ECD, GC-NPD
- HPLC, LC-MS
- ICP, ICP-MS
- access to more analytical instrumentation if necessary

Synthesis and Purification

- Milligram to Kilogram Glassware
- Inert Conditions Equipment
- High Performance Flash Chromatography
- Distillation Equipment - High Vacuum, Molecular (Kugelrohr), and Spinning Band Columns
- Preparative TLC
- Parr Pressure and Hydrogenation Reactor

Custom Synthesized Products

- PCBs (all 209 congeners), & hydroxy, methoxy, and methylsulfonyl metabolites
- Halo-Dibenzodioxins and Furans
- PBDEs (all 209 congeners) & hydroxy, methoxy, chloro metabolites
- Fluorinated PBDEs
- Other Brominated Flame Retardants
- PBBs
- PAHs, Nitro-PAHs, Methyl-PAHs
- Pesticides and metabolites
- Explosives and metabolites
- Nonyl- and Octylphenol Ethoxylates
- Mono- and Diester Phthalates
- Organophosphates
- Other Rare Chemicals

AccuStandard is renowned for its quick response to the needs for new compounds. The company's especially strong Synthesis Department allows the synthesis of important and unique products. Featured in its history of firsts are all of the 209 congeners of polychlorinated biphenyls (PCBs), 209 congeners of polybrominated diphenyl ethers (PBDEs) as well as many halogenated dioxins and dibenzofurans, PAHs, pesticides and fluorinated surrogates substituting the expensive isotopically labelled compounds.

Among the more recent introductions are the hydroxy and methoxy PBDE congeners, mixed bromo/chloro hydroxy and methoxy diphenyl ethers, organophosphate flame retardants, biofuels, plastic additives (AccuStandard authored the Handbook for the Chemical Analysis of Plastic and Polymer Additives published by CRC Press), EPA Method 535 pesticide derivatives and previously unavailable explosive standards.

Custom Formulations

With over 30,000+ custom and 10,000+ listed standards, there is a good chance that AccuStandard will have a standard to meet your needs. However, if your laboratory requires something specific, our Chemists will manufacture a Custom Standard to meet your unique requirements. Custom Standards are an economical and time saving way to have a Standard prepared for your individual needs.

Custom QC options

1. Gravimetric/Volumetric Certification: Each purity is measured gravimetrically and QC verified instrumentally (where available). Every component in the Standard is guaranteed to be within $\pm 0.5\%$ of the requested value unless otherwise stated on the Certificate of Analysis. The solutions are diluted to volume using Class A glassware. A Certificate of Analysis accompanies each Standard and documents the gravimetric values used.
2. Full Quantitative Certification: This QA/QC method includes extended GC analysis using both internal calibration standards plus statistical analysis. A data package containing analytical and gravimetric data can be provided if requested during the quotation phase (Organic Customs only).



Custom Packaging and Bulk Quantity Requirements

AccuStandard has the resources and equipment to meet your custom packaging requirements.

- Automated ampule filling & sealing 0.2 mL up to 20 mL and ampule sizes from 1 mL to 20 mL
- Quantities from 500 to over 500,000 ampules
- Homogeneity testing
- Amber ampules for added product stability
- Private labeling and packaging (OEM)

We can reduce your costs using the Cozzoli Auto Filling/Sealing Machine to package just the right size product for your application. OEM Standards - Privately labeled standards manufactured and tested to your specifications. Cold and under Nitrogen sealing available.



Custom Quotation Request Form

From: Company Contact _____
Company Name _____
Phone: () _____ Ext. _____
FAX: () _____
Email: _____

Send to:

Page ____ of ____

For Internal Use Only

AS Tech. Rep. _____ Product Ordering # _____
Quote Creation Date _____ Quoted price \$ _____

Requested Quantity

No. of Comps. _____
Product Description _____
Concentration _____
Solvent / Matrix _____

Organic

☐ 5 x 1 mL

☐ 10 x 1 mL

☐ 20 x 1 mL

☐ other ____ x ____

Inorganic

☐ 1 x 500 mL

☐ ____ x 500 mL

Component (s)	CAS No. (optional)	Concentration (if varied)	Concentration Units
1 _____	_____	_____	☐ ng/mL
2 _____	_____	_____	☐ µg/mL
3 _____	_____	_____	☐ mg/mL
4 _____	_____	_____	☐ wt. %
5 _____	_____	_____	☐ vol. %
6 _____	_____	_____	
7 _____	_____	_____	
8 _____	_____	_____	
9 _____	_____	_____	
10 _____	_____	_____	
11 _____	_____	_____	
12 _____	_____	_____	
13 _____	_____	_____	
14 _____	_____	_____	
15 _____	_____	_____	
16 _____	_____	_____	
17 _____	_____	_____	
18 _____	_____	_____	
19 _____	_____	_____	
20 _____	_____	_____	

Photocopy
this form for
future use

Quotation Notes _____

Requested Delivery Date _____

Contact / Order Information

For ordering information contact your AccuStandard Distributor
Visit our website www.accustandard.com

Liability:

- Products listed in this catalog are for research use only.
- No warranty for any particular application is expressed or implied.
- Due to the products hazardous nature, they should be handled by trained personnel.
- AccuStandard's liability will be limited to, replacement of product or refund of purchase price.
- Notice of claims must be made within thirty (30) days from the date of delivery.

AccuStandard.com



- ✓ Thousands of Standards
- ✓ Online SDSs, COAs and EPA Methods
- ✓ New Products and Technical Information

AccuStandard Trademarks and Registered Trademarks

The following trademarks and registered trademarks are accurate to the best of our knowledge at the time of printing. Please consult individual manufacturers and other resources for specific information.

AccuPAK

AccuStandard

AccuTrace

AllergenCheck

eStandards

PolyStandards

PolyAddCheck

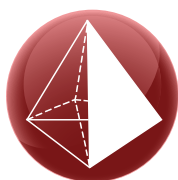


New Products in this Catalog

- Phthalates **17 NEW**
- Phosphate Flame Retardants (PFRs)
- PBDE Congeners (209)
- PBDE Metabolites **25 NEW**

- PBCDE Metabolites
- Biocides (EU Directive)
- Pesticides **Over 125 NEW**
- Plastic Additives **20 NEW**

- Bisphenol Analogs
- EN14105, EN15721 Biofuels
- Halobenzoquinones
- Imidazoles



AccuStandard®

ISO Guide 34 • 17025 • 9001