



2013
SOLID PHASE EXTRACTION
ENVIRONMENTAL CATALOG





ENVIRO

From our modest beginnings in Horsham, PA in 1986, UCT, LLC has evolved into a major competitor in the field of solid phase extraction technology. UCT is also an internationally recognized leader in the production of specialty chemicals including silanes and silicones. Our expertise in silane manufacturing allows greater control of the chemical processes involved in producing our high quality bonded phases.

UCT manufactures a wide range of highly reproducible cartridges from our proprietary polypropylene* allowing the analytical chemist a consistent extraction technique

virtually free of extractables. For the discriminating chemist, we offer our products in glass cartridges.

We have a strong reputation with the drug testing industry for dependable service, competitive pricing, innovative technology and reproducible products. We have now expended that reputation to include the environmental and agricultural testing industry.

UCT is pleased to bring you this catalogue containing our ever growing line of environmental testing products. We appreciate your support and look forward to your business. It is our promise to ensure your satisfaction by providing the best products, technical support, and service which you, our customer, demand and deserve.



In 1986, our synthetic polymer group introduced two new concepts into bonded phase extraction technology - copolymeric phases and reproducibility.

For years extraction chemists have been excited by the power and diverse applicability of bonded phase extraction, only to be disappointed by the lot to lot variability of products they received. Our polymerization methods have made this problem a thing of the past.

In constant pursuit of a better product, we acquired our raw materials supplier in 1993. This added greater depth to our knowledge of the manufacturing process for SPE silicas. We are now vertically integrated to better serve the SPE market.

We have now introduced our chemistries into a variety of products including bonded silica membranes, 48/96 well plates, GC liners, derivatizing agents, flash chromatography cartridges, and pre-packed polymeric cartridges.

WASTE WATER | PESTICIDES | OIL & GREASE | PAH

A significant effort has been put into learning and developing the polymeric silicon chemistries related to silica gel and its surface modified polymers. Our company's product line has grown to include over 35 different bonded phases used regularly by extraction chemists, as well as a variety of other SPE products.

Once you choose our products and support, you will understand why we are praised by our customers. The results will speak for themselves. We will work with you to meet your needs and to help you increase the ease, efficiency and cost effectiveness of your extractions.

* available in 1mL, 3mL, 6mL, 10mL and 15mL sizes



CUSTOMER SERVICE

PRICES AND TERMS

Our prices are subject to change without notice. The price in effect when we receive your order will apply. All prices are in US Dollars and are F.O.B. Lewistown, PA 17044. Terms of payment are net 30 days.

MINIMUM ORDERS

We welcome all orders, therefore, we do not have a minimum order requirement. When ordering, please include your purchase order number, complete "Ship To" and "Bill To" address, catalog number, quantity, and description of product(s). Also include your name and a phone number where you can be reached should we have any questions concerning your order.

Custom items will be evaluated on an individual basis; quantity requirements may be necessary.

SHIPMENTS

Normal processing is within 24 hours after receipt of an order. Unless special shipping requests have been made, our trained staff will send all orders by UPS Ground service. The appropriate shipping charges (freight & insurance costs) will be added to the invoice, unless otherwise instructed by the customer.

SPECIAL PRICING

We offer special pricing for volume purchases and standing orders. These discounts apply to bonded phase extraction column purchases only. Please call a sales representative for more information on special pricing qualifications.

RETURN POLICY

Our Quality Manager will handle all returns. Before returning merchandise, please call to obtain a return authorization number from the quality manager. We will need to know the reason for the return, date of purchase, purchase order number and invoice number in order to issue a return authorization number. Return merchandise must be received before a credit can be issued. Returns will not be accepted after 90 days. A restocking fee of 25% of the price paid, or a minimum of \$25.00 (whichever is greater) will be charged on all returns.

WARRANTY

All products manufactured by UCT are guaranteed against defects in materials and workmanship for a period of 90 days after shipment. UCT will replace any items that prove to be defective during this time period.

The exclusive remedy requires the end user to first advise UCT of the defective product by phone or in writing. Secondly, the defective product must be returned within 30 days after proper approval from our Quality Manager. All returns must indicate the purchase order number, the lot number and the shipping date. UCT's total liability is limited to the replacement cost of UCT products.

This warranty does not apply to damage resulting from misuse.

Placing An Order	Mail	Technical Support
Phone: 215.781.9255 800.541.0559 Fax: 215.785.1226	UCT, LLC 2731 Bartram Rd. Bristol, PA 19007	Phone: 215.781.9255 800.385.3153 Fax: 215.785.1226 Email: info@unitedchem.com Forum: forums.unitedchem.com Web: www.unitedchem.com





A GREENER EARTH

Here at UCT, LLC we are making an effort to keep the planet cleaner and greener for everyone. It is our belief that we must act now to preserve our environment for future generations to come.

Organizations we support:

Arbor Day Foundation

Audubon Society

Sierra Club

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ENVIRO-CLEAN®

BULK PRODUCT GUIDE

UCT reagents are available for the analysts who need the convenience of various materials in bulk form. Reagents are available in a variety of sizes for ordering convenience.

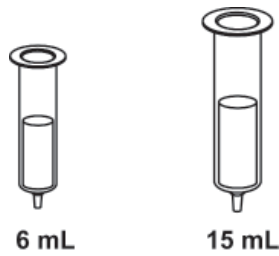




PRODUCT NAME	PART NUMBER	QUANTITY
Copper Granules 99.5% 30 Mesh	ECCU01K	1kg
	ECCU05K	5kg
	ECCU10K	10kg
Alumina Activity Super I, Neutral	ECALN00D	500g
	ECALN01K	1kg
	ECALN03K	3kg
Alumina Activity Super I, Basic	ECALB00D	500g
	ECALB01K	1kg
	ECALB03K	3kg
Alumina Activity Super I, Acid	ECALA00D	500g
	ECALA01K	1kg
	ECALA03K	3kg
Florisil® A 100-200 Mesh	ECFLOR00D	500g
	ECFLOR03K	3kg
Florisil® PR	ECFLS00D	500g
	ECFLS03K	3kg
Sodium Chloride ACS Grade	ECNA05K	5kg
	ECNA10K	10kg
	ECNA50K	50kg
Ottawa Sand	ECOTT05K	5kg
	ECOTT10K	10kg
	ECOTT25K	25kg
Sodium Sulfate Anhydrous ACS Grade Granular 60 Mesh	ECSS05K	5kg
	ECSS10K	10kg
	ECSS25K	25kg
	ECSS50K	50kg
Silica Gel 100-200 Mesh suitable for column chromatography	ECSIOH00D	500g
	ECSIOH03K	3kg
Magnesium Sulfate Anhydrous Organic Free Powder Reagent, 99.5% min.	ECMAG00D	500g (1 unit)
	ECMAG00DCS	1 case (4 units)
Celite 566 Hydromatrix Substitute	EC56601K	1kg
	EC56603K	3kg

SPECIALTY CARTRIDGES

FOR ENVIRONMENTAL EXTRACTION AND CLEAN UP



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PRODUCT NAME	DESCRIPTION	PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
CLEAN-ELUTE™	A diatomaceous earth matrix capable of being used within a pH range of 1-13.	CLEAN-ELUTE	25,000mg/200mL	108
Florisil® PR	Pesticide Residue grade Florisil®	EUFLS1M6	1000mg/6mL	30
Florisil® A	Equivalent to PR grade, but with a smaller particle size. Preferred by many environmental testing labs.	EUFLSA1M6	1000mg/6mL	30
ENVIRO-CLEAN® EPH Fractionation	(Gravity Flow) Developed for fractionation of MA EPH.	XRSIHT13M15 CUSILHT15M25	3000mg/15mL 5000mg/25mL	24 20
ENVIRO-CLEAN® C18	Optimized for non polar analytes, including pesticides, PCBs, PAHs, and formaldehyde.	EEC181M6	1000mg/6mL	30
ENVIRO-CLEAN® C18 Polar	For non polar and moderately polar analytes.	EUC181M6	1000mg/6mL	30
ENVIRO-CLEAN® 548	For EPA Method 548.1 Endothall extraction.	EC548006	6mL	30
ENVIRO-CLEAN® PS-DVB	EPA Method 526, 528, 529 and 8330	ECDVB156	500mg/6mL	30
ENVIRO-CLEAN® 521	Activated carbon for EPA Methods 521	EU52112M6	2000mg/6mL	30
ENVIRO-CLEAN® 523	Graphitized Carbon for Method 523	EC5232506	250mg/6mL	30
ENVIRO-CLEAN® 525	Specially designed C18 for EPA Method 525.2	EC525006	1500mg/6mL	30
ENVIRO-CLEAN® (GCB) 90² m/g Surface Area	For applications requiring graphitized carbon black with lower surface area.	EC535156	500mg/6mL	30
ENVIRO-CLEAN® 537	For EPA Method 537 Perfluorinated Alkyl Acids	ECDVB156P	500mg/6mL	30

Florisil® is a registered trademark of U.S. Silica.

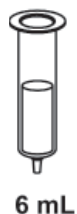


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SPECIALTY CARTRIDGES AND DISKS

FOR ENVIRONMENTAL EXTRACTION AND CLEAN UP



PRODUCT NAME	DESCRIPTION	PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
ENVIRO-CLEAN® Silica Gel Cartridge	For silica gel clean-up applications	EUSILMSSM26	1000mg silica/200mg muffled sodium sulfate anhydrous/6 mL	30
ENVIRO-CLEAN® PAH Extraction Salts	For AOAC Method Extraction of PAHs from Gulf of Mexico Seafood	ECQUUS2-MP	4000mg magesium sul- fate anhydrous/2000mg sodium chloride	50
ENVIRO-CLEAN® PAH	Centrifuge Tubes for PAH extraction	ECPAHR50CT	50mL	50
ZERO-BLANK™ FILTER	To prevent airborne SPE contamination	ECBLANK	83mL	6
ENVIRO-CLEAN® C08	C08 for EPA Method 549 Diquat and Paraquat	EEC08156	500mg/6mL	50
SODIUM SULFATE ANHYDROUS Drying Cartridge	A convenient product for the drying of extracts prior to concentration and analysis.	ECSS15M6	5000mg/6mL	30
HIGH LIPID CLEAN-UP	For the clean-up of agricultural matrices containing high levels of lipids. See application note.	ECPSAC1856	500mg C18 on top / 500mg PSA on bottom	30
PS-DVB Push-Thru Cartridge	DVB in a Push-Thru cartridge	ECDVBMC	160mg	25
Sodium Sulfate Push Thru Cartridge	A convenient product for the drying of extracts prior to concentration and analysis	ECSSLC	3000mg	100
Endcapped C18 Push-Thru Cartridge	Endcapped C18 in a Push-Thru cartridge	EEC1815MC-P	500mg	50

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ENVIRO MANIFOLD



ENVIRO-CLEAN® UNIVERSAL CARTRIDGES

(FITS THE HORIZON SPE-DEX® 4790 AUTOMATED EXTRACTION SYSTEM)



UNIVERSAL OIL & GREASE



UNIVERSAL 525



UNIVERSAL PAH / DRO



UNIVERSAL C18



UNIVERSAL 549

PRODUCT NAME	DESCRIPTION	PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
UNIVERSAL OIL & GREASE	For EPA Method 1664 / Sorbent C18	ECUNIOGXF	2000mg/83mL	15
UNIVERSAL 525	For EPA Method 525.2 / Sorbent C18	ECUNI525	1500mg/83mL	8
UNIVERSAL PAH / DRO	For PAH and Diesel Range Organics extractions / Sorbent C18	ECUNIPAH	2000mg/83mL	8
UNIVERSAL C18	For extraction of pesticides, herbicides and PCBs, etc. / Sorbent C18	ECUNIC18	1100mg/83mL	8
UNIVERSAL 549	For EPA Method 549 / Sorbent C08	ECUNI549	500mg/83mL	8
UNIVERSAL DVB	For extraction of hydrophobic analytes / Sorbent PS-DVB	ECUNIDVB500	500mg/83mL	8

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ENVIRO-CLEAN®

UNIVERSAL CARTRIDGES RESERVOIRS



PART NUMBER	DESCRIPTION	UNITS
FRITTED RESERVOIRS 10µm		
ERFT1FUNIP	1 (1/16", 10µm) PTFE frit	10
ERFT2FUNIP	2 PTFE frits	10
FRITTED RESERVOIRS 50µm		
ERTFT1FUNIP	1 50µm PTFE frit	10
EMPTY RESERVOIRS		
ERFV00UNIP	Empty Reservoir	10



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DISK MANIFOLD AND ACCESSORIES



47mm Aluminum Clamp



90mm Aluminum Clamp



47mm Support Base



47mm 300ml Funnel



90mm Support Base



90mm 1000ml Funnel



47mm/90mm
KEL-F Screen



Glass Cartridge Adaptor



PTFE Stopcock



Vacuum Pump



Waste Trap



Universal Cartridge Adaptor



Zero-Blank™ Adaptor



Bottle Holder



Jar Holder

- AVAILABLE IN 1, 3 OR 6 STATIONS
- ADAPTERS FOR UNIVERSAL SPE CARTRIDGES ARE AVAILABLE

DISK MANIFOLD AND ACCESSORIES



PART NUMBER	DESCRIPTION	UNITS
ECUCTVAC1	1 Station Manifold	1
ECUCTVAC3	3 Station Manifold	1
ECUCTVAC6	6 Station Manifold	1
ECCG1420	47mm Aluminum Clamp	1
ECUC0502	90mm Aluminum Clamp	1
ECQSB47	47mm Support Base	1
ECQFN300	47mm 300mL Funnel	1
ECQSB90	90mm Support Base	1
ECQFN1000	90mm 1000mL Funnel	1
ECUCT47	47mm KEL-F Screen	1
ECUCT90	90mm KEL-F Screen	1
ECUCTADP	Cartridge Adaptor	1
ECUNIBHD	Bottle Holder	1
ECROCKER400	Vacuum Pump	1
ECVMF06	PTFE Stopcocks for Block Manifolds	6
ECUCTTRAP20	20L Waste Trap	1
ECUCTMTRAP	Moisture Trap for Rocker400	1
ECUCTSC	Manifold Valve Assembly	1
ECUNIJHD100	Jar Holder	1
ECBMADP	Universal Cartridge Adaptor (Compatible with JT Baker Manifold*)	1
ECZERADP	Adaptor for Zero-Blank™ Cartridge	1

*JT Baker® is a registered trademark of Mallinckrodt Baker, Inc.

QuEChERS DISPERSIVE SPE EXTRACTION AND CLEAN-UP PRODUCTS



The QuEChERS method, first developed in 2003, used graphitic carbon black (GCB) as a sorbent to remove chlorophyll. While GCB is effective in removing chlorophyll from samples, it also removes planar (polar aromatic) pesticides such as chlorothalonil, coumaphos, hexachlorobenzene, thiabendazole, terbufos, quintozone and others, resulting in low recoveries for these analytes. Use of solvents of increasing polarity can remove the planar pesticides from GCB but with an increase in background interferences. UCT has developed a new solid phase sorbent that effectively removes chlorophyll without the loss of planar analytes or adding to background interference. The ChloroFiltr sorbent is used in QuEChERS clean-up products in place of GCB. No method modification is necessary when ChloroFiltr is substituted for GCB.

ChloroFiltr® Dispersive Products

PART NUMBER	DESCRIPTION	UNITS
CUMPSGG2CT	2mL micro-centrifuge tubes with 150mg magnesium sulfate, 50mg PSA and 50mg Chlorofiltr ® Designed to clean-up a 1 mL aliquot of supernatant.	100/pack
CUMPSGGC182CT	2mL micro-centrifuge tubes with 150mg magnesium sulfate, 50mg PSA, 50mg C18 and 50mg Chlorofiltr ® Designed to clean-up a 1 mL aliquot of supernatant.	100/pack
ECMPSGG15CT	15mL centrifuge tube with 900mg magnesium sulfate, 300mg PSA and 150mg Chlorofiltr ® Designed to clean-up a 3 mL aliquot of supernatant.	50/pack



QuEChERS Multi-Packs

QuEChERS extraction reagents for all of the popular QuEChERS methods are available in individual metalized pouches for your convenience. Each pack of 50 pouches comes with racks of 50 empty centrifuge tubes with plug seal caps.



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QuEChERS Multi-Packs

Micro Extraction Products—Reagent Pouches 50 mL centrifuge tubes included (50/pk)

Part Number	Contents
EC4MSSA50CT-MP	4000 mg MgSO ₄ 1000 mg Sodium Acetate
ECMSNA50CT-MP	8000 mg MgSO ₄ 3500 mg Sodium Chloride
EUMIV50CT-MP	6000 mg MgSO ₄ 1500 mg Sodium Chloride 750 mg Disodium Citrate sesquihydrate 1500 mg Sodium Citrate tribasic dihydrate
ECMSSA50CT-MP	6000 mg MgSO ₄ 1500 mg Sodium Acetate
ECMSSC50CT-MP	4000 mg MgSO ₄ 1000 mg Sodium Chloride
ECMSSC50CTFS-MP	6000 mg MgSO ₄ 1500 mg Sodium Chloride
ECQUVIN50CT-MP	8000 mg MgSO ₄ 2000 mg Sodium Chloride
ECQUEU750CT-MP European QuEChERS Method EN 15662	4000 mg MgSO ₄ 1000 mg Sodium Chloride 500 mg Sodium Citrate dibasic sesquihydrate 1000 mg Sodium Citrate tribasic dihydrate
ECMS4MSC550CT-MP	4000 mg MgSO ₄ 500 mg Sodium Chloride



QuEChERS Multi-Packs

Micro-Extraction Products-Reagent Pouches (without tubes)

Part Number	Contents
ECMSSA-MP	6000 mg MgSO ₄
	1500 mg Sodium Acetate
ECMSSC-MP	4000 mg MgSO ₄
	1000 mg Sodium Chloride
ECQUEU7-MP	4000 mg MgSO ₄
	1000 mg Sodium Chloride
	500 mg Sodium Citrate dibasic sesquihydrate
	1000 mg Sodium Citrate tribasic dihydrate
EUMIV-MP	6000 mg MgSO ₄
	1500 mg Sodium Chloride
	750 mg Disodium Citrate sesquihydrate
	1500 mg Sodium Citrate tribasic dihydrate

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Extraction Kits

Part Number	Contents
ECQUEU215CT 15 mL 50/pk	6000 mg MgSO ₄ 1500 mg Sodium Acetate
ECQUEU750CT 50 mL 50/pk European QuEChERS Method EN 15662	4000 mg MgSO ₄ 1000 mg Sodium Chloride 500 mg Sodium Citrate dibasic sesquihydrate 1000 mg Sodium Citrate tribasic dihydrate
ECMSSC50CT 50 mL 250/pk	4000 mg MgSO ₄ 1000 mg Sodium Chloride
ECMSSA50CT 50 mL 250/pk	6000 mg MgSO ₄ 1500 mg Sodium Acetate
EUMIV50CT 50 mL 250/pk	6000 mg MgSO ₄ 1500 mg Sodium Chloride 750 mg Disodium Citrate sesquihydrate 1500 mg Sodium Citrate tribasic dihydrate
ECMS4MSC550CT 50 mL Designed for Acrylamide Extraction 50/pk	4000 mg MgSO ₄ 500 mg Sodium Chloride
ECQUEU415CT 15 mL 50/pk	4000 mg MgSO ₄ 1000 mg Sodium Chloride 500 mg Sodium Citrate dibasic sesquihydrate 1000 mg Sodium Citrate tribasic dihydrate

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QuEChERS DISPERSIVE CLEAN-UP PRODUCTS



Designed for Use with the QuEChERS Method: Quick, Easy, Cheap, Effective, Rugged and Safe approach for determining pesticide residues, developed at the USDA-ARS Eastern Regional Research Center in Wyndmoor, PA.

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Part Number	Size	Contents
ECQUEU12CT 100/pk	2 mL	150 mg MgSO ₄ 25 mg PSA
ECQUEU32CT 100/pk	2 mL	150 mg MgSO ₄ 25 mg PSA 2.5 mg GCB
ECQUEU42CT 100/pk	2 mL	150 mg MgSO ₄ 25 mg PSA 7.5 mg GCB
ECQUEU22CT 100/pk	2 mL	150 mg MgSO ₄ 25 mg PSA 25 mg endcapped C18
CUMPS2CT 100/pk	2 mL	150 mg MgSO ₄ 50 mg PSA
CUMPSCB2CT 100/pk	2 mL	150 mg MgSO ₄ 50 mg PSA 50 mg GCB
CUMPSC1875CB2CT 100/pk	2 mL	150 mg MgSO ₄ 50 mg PSA 7.5 mg GCB 50 mg endcapped C18



QuEChERS Centrifuge Tubes

Dispersive Products

Part Number	Size	Contents
CUMPSC18CT 100/pk	2 mL	150 mg MgSO ₄ 50 mg PSA 50 mg endcapped C18
CUMPS15C18CT 100/pk	2 mL	150 mg MgSO ₄ 150 mg PSA 50 mg endcapped C18
ECMPS15CT 50/pk	15 mL	900 mg MgSO ₄ 150 mg PSA
ECQUEU315CT 50/pk	15 mL	900 mg MgSO ₄ 150 mg PSA 150 mg endcapped C18
ECQUEU615CT 50/pk	15 mL	900 mg MgSO ₄ 150 mg PSA 45 mg GCB
ECQUEU515CT 50/pk	15 mL	900 mg MgSO ₄ 150 mg PSA 15 mg GCB
ECMPSA50CT 250/pk	50 mL	1200 mg MgSO ₄ 200 mg PSA
ECMPSCB15CT 50/pk	15 mL	900 mg MgSO ₄ 300mg PSA 150 mg GCB
ECMPSC1815CT 50/pk	15 mL	900 mg MgSO ₄ 300mg PSA 150 mg endcapped C18
ECMS12CPA415CT 50/pk	15 mL	1200 mg MgSO ₄ 400 mg PSA
CUMPSC1815CT2 50/pk	15 mL	1200 mg MgSO ₄ 400 mg PSA 400 mg endcapped C18
ECQUUS215CT 50/pk	15 mL	1200 mg MgSO ₄ 400 mg PSA 400 mg GCB 400 mg endcapped C18



QuEChERS Centrifuge Tubes

Dispersive Products



Part Number	Size	Contents
ECQUEU1115CT 50/pk	15 mL	1200 mg MgSO ₄ 400 mg PSA 400 mg GCB
ECMPSA615CT 50/pk	15 mL	1800 mg MgSO ₄ 600 mg PSA
ECMNAX15CT 50/pk Florida-Modified QuEChERS for State Program Fruits and Vegetables	15 mL	900 mg MgSO ₄ 150 mg Aminopropyl bonded silica
ECMSC1850CT 50/pk For cleanup of extracts containing analytes with acidic functionality such as mycotoxins and some herbicides	50 mL	1500 mg MgSO ₄ 500 mg endcapped C18

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Quick QuEChERS

Just push supernatant through
cartridge for clean-up

Part Number	Size	Contents
ECPURMPSMC 100/pk	Medium cartridge	110 mg magnesium sulfate anhydrous and 180 mg PSA with PTFE frits



Cartridge Products



Dual phase cartridges are available as an alternative to traditional QuEChERS dSPE clean-up
30/pk Products are manufactured with PTFE frits

Part Number	Size	Contents
ECPSACB6	6 mL	200 mg Graphitized Carbon Black GCB (top layer) PTFE frit 400 mg PSA (bottom layer)
ECPSACB256	6 mL	(recommended) 250 mg Graphitized Carbon Black GCB (top layer) PTFE frit 500 mg PSA (bottom layer)
ECPSACB506	6 mL	500 mg Graphitized Carbon Black GCB (top layer) PTFE frit 500 mg PSA (bottom layer)
ECNAXCB506	6 mL	500 mg Graphitized Carbon Black GCB (top layer) PTFE frit 500 mg Aminopropyl bonded silica (bottom layer)

ENVIRO EC548006

Our 548 cartridge is specifically designed to fulfill the requirements of EPA Method 548.1 DETERMINATION OF ENDOTHALL IN DRINKING WATER BY ION-EXCHANGE EXTRACTION, ACIDIC METHANOL METHYLATION AND GAS CHROMATOGRAPHY/MASS SPECTROMETRY



ENVIRO-CLEAN® SORBENTS

ENVIRO-CLEAN® solid phase extraction cartridges are designed especially for the isolation and separation of environmental analytes such as pesticides, herbicides, polyaromatic hydrocarbons, polychlorinated biphenyls and other environmentally related compounds.

ENVIRO-CLEAN® offers a selection of high quality solid phase extraction cartridges geared to support the environmental chemist with a very broad range of analytical applications. The most important function of the solid phase extraction cartridge for the environmental chemist is the clean separation of an analyte from a variety of compounds. An important function of the extraction cartridge is that it will concentrate a low level of analyte from large samples for accurate analysis. When evaluating analyte extraction or separation, ENVIRO-CLEAN® offers nonpolar, polar, ion-exchange and copolymeric phases for application in the environmental laboratory.

Non-polar phases are often referred to as hydrophobic and function by the interactions of the carbon-hydrogen bond of the analyte and the sorbent. C18 is the most widely used of these phases. EPA approved methods for analyzing organics in drinking water specify the C18 hydrophobic phase.

This method requires that large sample volumes (liters)

be analyzed which utilizes the compound concentration function of the hydrophobic sorbent.

Polar or hydrophilic phases function by hydrogen bonding, pi-pi, and dipole-dipole interaction. Ion-exchange interactions occur between the sorbent and the analyte of opposite charge. ENVIRO-CLEAN® sorbents are available in either cation or anion exchangers exhibiting both weak and strong characteristics.

Copolymeric phases offer a new approach to the environmental analyst by providing very clean extracts and high compound recovery. Dual functionalities, hydrophobic plus ionexchange or polar allow a higher degree of selectivity than was previously possible. Analytes retained by multiple mechanisms can be washed by disrupting only one mechanism. Careful selection of the solvent strength results in a greater removal of chromatographic contamination.

SPE TERMINOLOGY

- **ACTIVATION** – a process of rinsing the sorbent with a solvent to clean the bed and extend the bonded pendant groups (i.e. C18) to maximize its effectiveness
- **A BED volume** is the quantity of solvent needed to cover the sorbent
- **CAPACITY** – The amount of analyte that a sorbent can retain
- **RETENTION** is the attraction a solid-phase has for the analyte to cause the analyte to “stick” on the sorbent
- **WASH SOLVENT** is solvent used to wash interferences off of the sorbent prior to elution
- **RETENTION** - is the attraction a solid-phase has for the analyte that causes the analyte to “adsorb” to the sorbent
- **ELUTION** is the process for removing an analyte from the sorbent and should require no more than 5 bed volumes of solvent
- **A SORBENT** is the solid-phase material to which analytes attach during the extraction process



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HOW TO READ ENVIRO-CLEAN® PART NUMBERS:

ENVIRO-CLEAN® CODE

EUBCX153 Cartridge Size (mL)

EU: Unencapped Cartridge
EE: Encapped Cartridge

Sorbent Type*

Packing Size (x 100mg)
("M" signifies x 1,000mg)

SINGLE & DUAL PHASE
1: Cartridge contains given sorbent type.
2: Cartridge contains given sorbent type plus a hydrophobic phase.

EUBCX153:
ENVIRO-CLEAN® Unencapped Benzenesulfonic Acid Cation Exchange Cartridge, Single Phase, 500mg/3mL.

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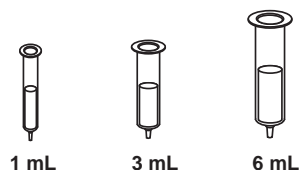
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*Sorbent Type

CODE	DESCRIPTION
C08, C18, C30	Carbon Chains
SIL	Unbonded Silica
PSA	n-2 Aminoethyl
BCX	Benzenesulfonic Acid Cation Exchanger
PCX	Propylsulfonic Acid Cation Exchanger
CCX	Carboxylic Acid Cation Exchanger
QAX	Quaternary Amine Anion Exchanger
NAX	Aminopropyl Anion Exchanger
FLS	Florisil® PR
ALA	Alumina - Acid
ALB	Alumina - Base
ALN	Alumina - Neutral
CNP	Cyanopropyl
CYH	Cyclohexyl
DOL	Diol
PHY	Phenyl



POLYMERIC RESINS FOR SOLID PHASE EXTRACTION



DBX - Benzenesulfonic Acid + C18		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSDBX031	30mg/1mL	100
SSDBX033	30mg/3mL	50
SSDBX056	50mg/6mL	50

DVB - Polystyrene Divinylbenzene		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSDVB031	30mg/1mL	100
SSDVB033	30mg/3mL	50
SSDVB056	50mg/6mL	50

BCX - Benzenesulfonic Acid		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSBCX031	30mg/1mL	100
SSBCX033	30mg/3mL	50
SSBCX056	50mg/6mL	50

C18 - Reverse Phase		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSC18031	30mg/1mL	100
SSC18033	30mg/3mL	50
SSC18056	50mg/6mL	50

QAX - Quaternary Amine		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSQAX031	30mg/1mL	100
SSQAX033	30mg/3mL	50
SSQAX056	50mg/6mL	50

CCXH - Carboxylic Acid (High-Flow)		
PART NUMBER	AMT. SORBENT/ TUBE VOL.	UNITS
SSCCXH031	30mg/1mL	100
SSCCXH033	30mg/3mL	50
SSCCXH056	50mg/6mL	50

Application:

Dual functionality for weak acids and hydrophobic compounds.

Application:

Extraction of aromatic hydrocarbons and other hydrophobic compounds.

Application:

Scavenger for amines, alcohols and other nucleophiles.

Application:

Removes hydrophobic impurities, de-salting and purification of hydrophobic compounds.

Application:

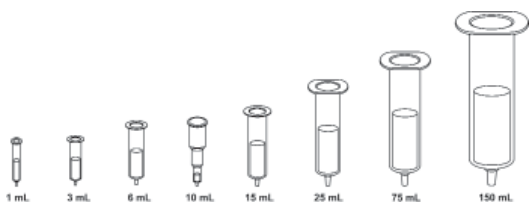
Removes large or more hydrophilic compounds.

Application:

Removes large or more hydrophilic compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (25-40 µm)
Standard Particle (40-63 µm)
Large Particle (80-200 µm)

C2, Ethyl

PART NUMBER UNENCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EEC021L1	—	50 mg/1 mL	100
EEC02111	—	100 mg/1 mL	100
EEC02123	—	200 mg/3 mL	50
EEC02153	—	500 mg/3 mL	50
EEC02156	—	500 mg/6 mL	50
EEC021M6	—	1000 mg/6 mL	30
EEC0211Z	—	100 mg/10 mL	50
EEC0212Z	—	200 mg/10 mL	50
EEC0215Z	—	500 mg/10 mL	50
EEC0212M15	—	2000 mg/15 mL	20
EEC0215M25	—	5000 mg/25 mL	20
EEC02110M75	—	10,000 mg/75 mL	10

% Organic Loading: 5.4 – 7.0

Application:

Highly Hydrophobic Compounds

C8, Octyl

PART NUMBER UNENCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUC081L1	EEC081L1	50 mg/1 mL	100
EUC08111	EEC08111	100 mg/1 mL	100
EUC08123	EEC08123	200 mg/3 mL	50
EUC08153	EEC08153	500 mg/3 mL	50
EUC08156	EEC08156	500 mg/6 mL	50
EUC081M6	EEC081M6	1000 mg/6 mL	30
EUC0811Z	EEC0811Z	100 mg/10 mL	50
EUC0812Z	EEC0812Z	200 mg/10 mL	50
EUC0815Z	EEC0815Z	500 mg/10 mL	50
EUC0812M15	EEC0812M15	2000 mg/15 mL	20
EUC0815M25	EEC0815M25	5000 mg/25 mL	20
EUC08110M75	EEC08110M75	10,000 mg/75 mL	10

% Organic Loading: 11.1

Application:

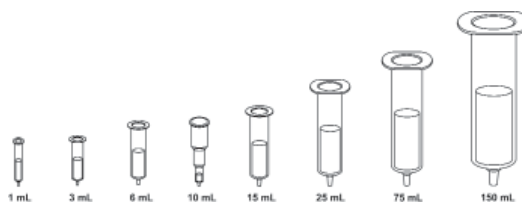
Optimized for non polar analytes, including pesticides, PCBs, PAHs, and formaldehyde.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
 Intermediate Particle (25-40 µm)
 Standard Particle (40-63 µm)
 Large Particle (80-200 µm)



C18, Octadecyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUC181L1	EEC181L1	50 mg/1 mL	100
EUC18111	EEC18111	100 mg/1 mL	100
EUC18123	EEC18123	200 mg/3 mL	50
EUC18153	EEC18153	500 mg/3 mL	50
EUC18156	EEC18156	500 mg/6 mL	50
EUC181M6	EEC181M6	1000 mg/6 mL	30
EUC1811Z	EEC1811Z	100 mg/10 mL	50
EUC1812Z	EEC1812Z	200 mg/10 mL	50
EUC1815Z	EEC1815Z	500 mg/10 mL	50
EUC1812M15	EEC1812M15	2000 mg/15 mL	20
EUC1815M25	EEC1815M25	5000 mg/25 mL	20
EUC18110M75	EEC18110M75	10,000 mg/75 mL	10

% Organic Loading: 21.70

Application:

Optimized for non polar analytes, including pesticides, PCBs, PAHs, and formaldehyde.

C30, Tricontyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUC301L1	EEC301L1	50 mg/1 mL	100
EUC30111	EEC30111	100 mg/1 mL	100
EUC30123	EEC30123	200 mg/3 mL	50
EUC30153	EEC30153	500 mg/3 mL	50
EUC30156	EEC30156	500 mg/6 mL	50
EUC301M6	EEC301M6	1000 mg/6 mL	30
EUC3011Z	EEC3011Z	100 mg/10 mL	50
EUC3012Z	EEC3012Z	200 mg/10 mL	50
EUC3015Z	EEC3015Z	500 mg/10 mL	50

% Organic Loading: 22.00

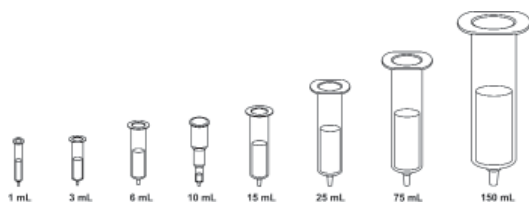
Application:

Removes smallest or least hydrophobic compounds.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (25-40 μm)
 Standard Particle (40-63 μm)
 Large Particle (80-200 μm)

Cyclohexyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCYH1L1	EECYH1L1	50 mg/1 mL	100
EUCYH111	EECYH111	100 mg/1 mL	100
EUCYH123	EECYH123	200 mg/3 mL	50
EUCYH153	EECYH153	500 mg/3 mL	50
EUCYH156	EECYH156	500 mg/6 mL	50
EUCYH1M6	EECYH1M6	1000 mg/6 mL	30
EUCYH11Z	EECYH11Z	100 mg/10 mL	50
EUCYH12Z	EECYH12Z	200 mg/10 mL	50
EUCYH15Z	EECYH15Z	500 mg/10 mL	50
EUCYH12M15	EECYH12M15	2000 mg/15 mL	20
EUCYH15M25	EECYH15M25	5000 mg/25 mL	20
EU-CYH110M75	EECYH110M75	10000 mg/75 mL	10

% Organic Loading: 11.00

Application:

Scavenger for phenolic compounds.

Phenyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUPHY1L1	EPEPHY1L1	50 mg/1 mL	100
EUPHY111	EPEPHY111	100 mg/1 mL	100
EUPHY123	EPEPHY123	200 mg/3 mL	50
EUPHY153	EPEPHY153	500 mg/3 mL	50
EUPHY156	EPEPHY156	500 mg/6 mL	50
EUPHY1M6	EPEPHY1M6	1000 mg/6 mL	30
EUPHY11Z	EPEPHY11Z	100 mg/10 mL	50
EUPHY12Z	EPEPHY12Z	200 mg/10 mL	50
EUPHY15Z	EPEPHY15Z	500 mg/10 mL	50
EUPHY12M15	EPEPHY12M15	2000 mg/15 mL	20
EUPHY15M25	EPEPHY15M25	5000 mg/25 mL	20
EU-PHY110M75	EPEPHY110M75	10000 mg/75 mL	10

% Organic Loading: 11.00

Application:

Scavenger for polar compounds.

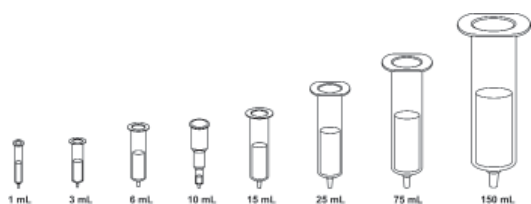
ENVIRO CLEAN® EUFLSA1M6

UCT hydrophilic sorbents provide unmatched activity for the extraction of polar compounds. The analyst can choose from a wide range of cartridge sizes, sorbent types and quantities tailored to the specific requirements of each analysis.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHILIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

- Small Particle (5-20 µm)
- Intermediate Particle (25-40 µm)
- Standard Particle (40-63 µm)
- Large Particle (80-200 µm)

Florisil® A			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUFLSA1L1	–	50 mg/1 mL	100
EUFLSA111	–	100 mg/1 mL	100
EUFLSA123	–	200 mg/3 mL	50
EUFLSA153	–	500 mg/3 mL	50
EUFLSA156	–	500 mg/6 mL	50
EUFLSA1M6	–	1000 mg/6 mL	30
EUFLSA11Z	–	100 mg/10 mL	50
EUFLSA12Z	–	200 mg/10 mL	50
EUFLSA15Z	–	500 mg/10 mL	50
EUFLSA12M15	–	2000 mg/15 mL	20
EUFLSA15M25	–	5000 mg/25 mL	20
EUFLSA110M75	–	10,000 mg/75 mL	10

% Organic Loading: N/A

Application:
Extract Clean-Up

Florisil® is a registered trademark of U.S. Silica

Florisil® PR			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUFLS1L1	–	50 mg/1 mL	100
EUFLS111	–	100 mg/1 mL	100
EUFLS123	–	200 mg/3 mL	50
EUFLS153	–	500 mg/3 mL	50
EUFLS156	–	500 mg/6 mL	50
EUFLS1M6	–	1000 mg/6 mL	30
EUFLS11Z	–	100 mg/10 mL	50
EUFLS12Z	–	200 mg/10 mL	50
EUFLS15Z	–	500 mg/10 mL	50
EUFLS12M15	–	2000 mg/15 mL	20
EUFLS15M25	–	5000 mg/25 mL	20
EUFLS110M75	–	10,000 mg/75 mL	10

% Organic Loading: N/A

Application:
Removes polar type compounds.

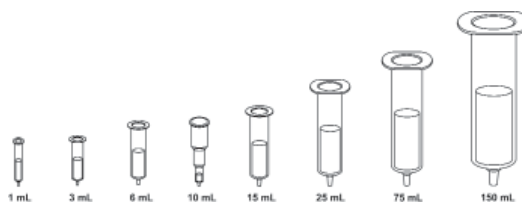
Florisil® is a registered trademark of U.S. Silica

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHILIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

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- Intermediate Particle (25-40 µm)
- Standard Particle (40-63 µm)
- Large Particle (80-200 µm)



Alumina Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUALA1L1	–	50 mg/1 mL	100
EUALA111	–	100 mg/1 mL	100
EUALA123	–	200 mg/3 mL	50
EUALA153	–	500 mg/3 mL	50
EUALA156	–	500 mg/6 mL	50
EUALA1M6	–	1000 mg/6 mL	30
EUALA11Z	–	100 mg/10 mL	50
EUALA12Z	–	200 mg/10 mL	50
EUALA15Z	–	500 mg/10 mL	50
EUALA12M15	–	2000 mg/15 mL	20
EUALA15M25	–	5000 mg/25 mL	20
EUALA110M75	–	10,000 mg/75 mL	10

% Organic Loading: N/A

Application:

Removes polar type compounds.

Alumina Base			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUALB1L1	–	50 mg/1 mL	100
EUALB111	–	100 mg/1 mL	100
EUALB123	–	200 mg/3 mL	50
EUALB153	–	500 mg/3 mL	50
EUALB156	–	500 mg/6 mL	50
EUALB1M6	–	1000 mg/6 mL	30
EUALB11Z	–	100 mg/10 mL	50
EUALB12Z	–	200 mg/10 mL	50
EUALB15Z	–	500 mg/10 mL	50
EUALB12M15	–	2000 mg/15 mL	20
EUALB15M25	–	5000 mg/25 mL	20
EUALB110M75	–	10,000 mg/75 mL	10

% Organic Loading: N/A

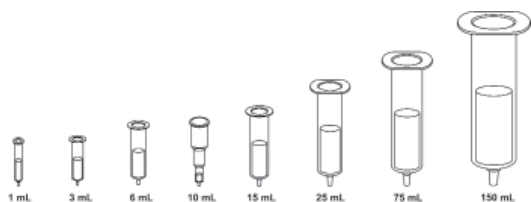
Application:

Removes polar type compounds.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHILIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

- Small Particle (5-20 μm)
- Intermediate Particle (25-40 μm)
- Standard Particle (40-63 μm)
- Large Particle (80-200 μm)

Alumina Neutral			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUALN1L1	–	50 mg/1 mL	100
EUALN111	–	100 mg/1 mL	100
EUALN123	–	200 mg/3 mL	50
EUALN153	–	500 mg/3 mL	50
EUALN156	–	500 mg/6 mL	50
EUALN1M6	–	1000 mg/6 mL	30
EUALN11Z	–	100 mg/10 mL	50
EUALN12Z	–	200 mg/10 mL	50
EUALN15Z	–	500 mg/10 mL	50
EUALN12M15	–	2000 mg/15 mL	20
EUALN15M25	–	5000 mg/25 mL	20
EUALN110M75	–	10,000 mg/75 mL	10

% Organic Loading: N/A

Application:

Removes polar type compounds.

Diol			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUDOL1L1	–	50 mg/1 mL	100
EUDOL111	–	100 mg/1 mL	100
EUDOL123	–	200 mg/3 mL	50
EUDOL153	–	500 mg/3 mL	50
EUDOL156	–	500 mg/6 mL	50
EUDOL1M6	–	1000 mg/6 mL	30
EUDOL11Z	–	100 mg/10 mL	50
EUDOL12Z	–	200 mg/10 mL	50
EUDOL15Z	–	500 mg/10 mL	50
EUDOL12M15	–	2000 mg/15 mL	20
EUDOL15M25	–	5000 mg/25 mL	20
EUDOL110M75	–	10,000 mg/75 mL	10

% Organic Loading: 8.00

Application:

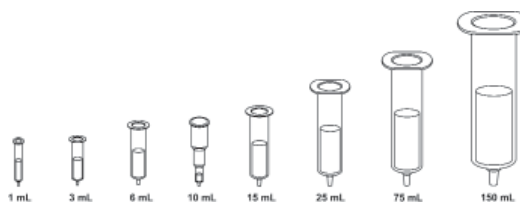
Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHILIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (25-40 µm)
Standard Particle (40-63 µm)
Large Particle (80-200 µm)



Unbonded Silica (Acid Washed)			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUSIL1L1	–	50 mg/1 mL	20 x 5
EUSIL111	–	100 mg/1 mL	20 x 5
EUSIL123	–	200 mg/3 mL	10 x 5
EUSIL153	–	500 mg/3 mL	10 x 5
EUSIL156	–	500 mg/6 mL	10 x 5
EUSIL1M6	–	1000 mg/6 mL	6 x 5
EUSIL11Z	–	100 mg/10 mL	10 x 5
EUSIL12Z	–	200 mg/10 mL	10 x 5
EUSIL15Z	–	500 mg/10 mL	10 x 5
EUSIL12M15	–	2000 mg/15 mL	4 x 5
EUSIL15M25	–	5000 mg/25 mL	4 x 5
EUSIL110M75	–	10,000 mg/75 mL	2 x 5

% Organic Loading: 4.00

Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

High-Surface Activity Silica			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EPHSIL1L1	–	50 mg/1 mL	20 x 5
EPHSIL111	–	100 mg/1 mL	20 x 5
EPHSIL123	–	200 mg/3 mL	10 x 5
EPHSIL153	–	500 mg/3 mL	10 x 5
EPHSIL156	–	500 mg/6 mL	10 x 5
EPHSIL1M6	–	1000 mg/6 mL	6 x 5
EPHSIL11Z	–	100 mg/10 mL	10 x 5
EPHSIL12Z	–	200 mg/10 mL	10 x 5
EPHSIL15Z	–	500 mg/10 mL	10 x 5
EPHSIL12M15	–	2000 mg/15 mL	4 x 5
EPHSIL15M25	–	5000 mg/25 mL	4 x 5
EPHSIL110M75	–	10,000 mg/75 mL	2 x 5

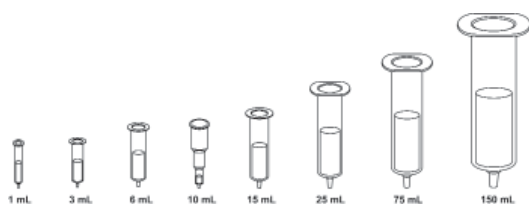
% Organic Loading: 4.00

Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

HYDROPHILIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

- Small Particle (5-20 μm)
- Intermediate Particle (25-40 μm)
- Standard Particle (40-63 μm)
- Large Particle (80-200 μm)

Carbon - Graphitized, Non-Porous, 120/400 Mesh

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCARB1L1	—	50 mg/1 mL	100
EUCARB111	—	100 mg/1 mL	100
EUCARB123	—	200 mg/3 mL	50
EUCARB153	—	500 mg/3 mL	50
EUCARB126	—	200 mg/6 mL	50
EUCARB156	—	500 mg/6 mL	50
EUCARB1M6	—	1000 mg/6 mL	30
EUCARB11Z	—	100 mg/10 mL	50
EUCARB12Z	—	200 mg/10 mL	50
EUCARB15Z	—	500 mg/10 mL	50
EUCARB1M15	—	1000 mg/15 mL	20
EUCARB12M15	—	2000 mg/15 mL	20

CLEAN-UP® Carbon

Carbon supports have been used to isolate extremely polar organic compounds. They work by an adsorption mechanism with a high surface area and ion exchange. This interaction can happen in a wide range of polar and non-polar solvents.

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SPE FACTS

- When choosing a sorbent the RETENTION of analyte should be strong enough so that 20 BED volumes of WASH solvent will not elute the analyte
- CAPACITY of bonded silicas can range from 1% to 15% depending upon analyte
- pKa is the pH at which 50% of the analyte is ionic and 50% is neutral
- RETENTION of analytes by POLAR interactions is aided by NON-POLAR solvents
- RETENTION of analytes by ION-EXCHANGE sorbent is aided by:
 - o Solvent/matrix pH should be between the pKa of the analyte and sorbent
 - o Solvent/matrix ionic strength must be low
 - o Sorbent should be equilibrated with LOW selectivity counter-ion
- ELUTION of analytes from ION-EXCHANGE sorbent is aided by:
 - o Solvent/matrix pH ABOVE the pKa of CATION or below ANION
 - o Solvent/matrix ionic strength HIGH
 - o Solvent/matrix contains HIGH selectivity counter-ions (SeeTable1)
- Solvent ACTIVATION of the solid-phase is necessary for the proper interaction of the sorbent with the analyte
- ELUTION of analytes from POLAR sorbents is aided by POLAR solvents



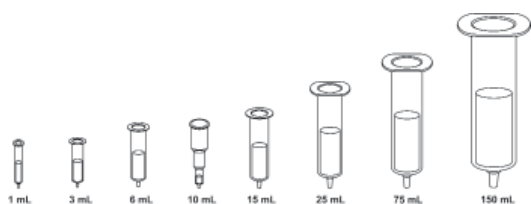
STYRE-SCREEN® DBX

UCT STYRE-SCREEN® anion exchange and cation exchange polymeric sorbents are available with a variety of standard counter-ions. Cartridges are ready to use which means that time consuming exchange reactions can be eliminated reducing valuable laboratory preparation time. With a wide range of sizes, sorbent types and quantities, cartridges are available for every analytical requirement.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

ANION EXCHANGE PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

- Small Particle (5-20 μm)
- Intermediate Particle (25-40 μm)
- Standard Particle (40-63 μm)
- Large Particle (80-200 μm)

Aminopropyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUNAX1L1	–	50 mg/1 mL	100
EUNAX111	–	100 mg/1 mL	100
EUNAX123	–	200 mg/3 mL	50
EUNAX153	–	500 mg/3 mL	50
EUNAX156	–	500 mg/6 mL	50
EUNAX1M6	–	1000 mg/6 mL	30
EUNAX11Z	–	100 mg/10 mL	50
EUNAX12Z	–	200 mg/10 mL	50
EUNAX15Z	–	500 mg/10 mL	50
EUNAX12M15	–	2000 mg/15 mL	20
EUNAX15M25	–	5000 mg/25 mL	20
EUNAX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 6.50

Application:

Removes hydrophobic impurities, de-salting and purification of hydrophobic compounds.

Quaternary Amine with Chloride Counter Ion

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUQAX1L1	–	50 mg/1 mL	100
EUQAX111	–	100 mg/1 mL	100
EUQAX123	–	200 mg/3 mL	50
EUQAX153	–	500 mg/3 mL	50
EUQAX156	–	500 mg/6 mL	50
EUQAX1M6	–	1000 mg/6 mL	30
EUQAX11Z	–	100 mg/10 mL	50
EUQAX12Z	–	200 mg/10 mL	50
EUQAX15Z	–	500 mg/10 mL	50
EUQAX12M15	–	2000 mg/15 mL	20
EUQAX15M25	–	5000 mg/25 mL	20
EUQAX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 8.40

Application:

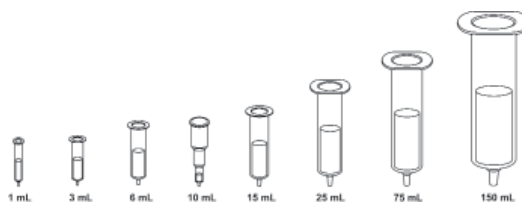
Scavenger for acids and sulfonyl chlorides, isocyanates and weak electrophiles.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

ANION EXCHANGE PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

- Small Particle (5-20 µm)
- Intermediate Particle (25-40 µm)
- Standard Particle (40-63 µm)
- Large Particle (80-200 µm)



Quaternary Amine with Acetate Counter Ion			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EAQAX111	–	100 mg/1 mL	100
EAQAX123	–	200 mg/3 mL	50
EAQAX153	–	500 mg/3 mL	50
EAQAX156	–	500 mg/6 mL	50
EAQAX1M6	–	1000 mg/6 mL	30
EAQAX11Z	–	100 mg/10 mL	50
EAQAX12Z	–	200 mg/10 mL	50
EAQAX15Z	–	500 mg/10 mL	50
EAQAX12M15	–	2000 mg/15 mL	20
EAQAX15M25	–	5000 mg/25 mL	20
EAQAX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 8.40

Application:

Scavenger for acids and sulfonyl chlorides, isocyanates and weak electrophiles. Useful when charge on ion being removed is weaker than the acetate counter ion.

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Quaternary Amine with Hydroxide Counter Ion			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EHQAX111	–	100 mg/1 mL	100
EHQAX123	–	200 mg/3 mL	50
EHQAX153	–	500 mg/3 mL	50
EHQAX156	–	500 mg/6 mL	50
EHQAX1M6	–	1000 mg/6 mL	30
EHQAX11Z	–	100 mg/10 mL	50
EHQAX12Z	–	200 mg/10 mL	50
EHQAX15Z	–	500 mg/10 mL	50
EHQAX12M15	–	2000 mg/15 mL	20
EHQAX15M25	–	5000 mg/25 mL	20
EHQAX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 8.40

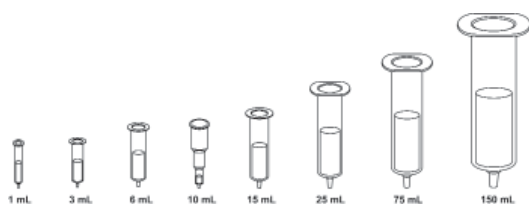
Application:

Scavenger for acids and sulfonyl chlorides, isocyanates and weak electrophiles. Useful when charge on ion being removed is weaker than the hydroxide counter ion.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

ANION EXCHANGE PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (25-40 μm)
 Standard Particle (40-63 μm)
 Large Particle (80-200 μm)

Quaternary Amine with Formate Counter Ion

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EFOAX1L1	–	50 mg/1 mL	100
EFOAX111	–	100 mg/1 mL	100
EFOAX123	–	200 mg/3 mL	50
EFOAX153	–	500 mg/3 mL	50
EFOAX156	–	500 mg/6 mL	50
EFOAX1M6	–	1000 mg/6 mL	30
EFOAX11Z	–	100 mg/10 mL	50
EFOAX12Z	–	200 mg/10 mL	50
EFOAX15Z	–	500 mg/10 mL	50
EFOAX12M15	–	2000 mg/15 mL	20
EFOAX15M25	–	5000 mg/25 mL	20
EFOAX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 8.40

Application:

Scavenger for acids and sulfonyl chlorides, isocyanates and weak electrophiles. Useful when charge on ion being removed is weaker than the formate counter ion.

Polyimine

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUPAX1L1	–	50 mg/1 mL	100
EUPAX111	–	100 mg/1 mL	100
EUPAX123	–	200 mg/3 mL	50
EUPAX153	–	500 mg/3 mL	50
EUPAX156	–	500 mg/6 mL	50
EUPAX1M6	–	1000 mg/6 mL	30
EUPAX11Z	–	100 mg/10 mL	50
EUPAX12Z	–	200 mg/10 mL	50
EUPAX15Z	–	500 mg/10 mL	50
EUPAX12M15	–	2000 mg/15 mL	20
EUPAX15M25	–	5000 mg/25 mL	20
EUPAX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 13.50

Application:

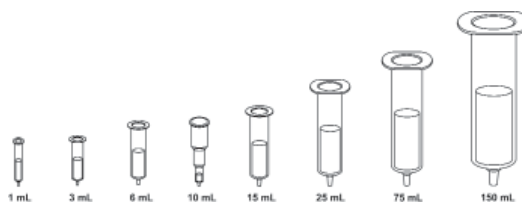
Removes hydrophobic impurities, de-salting and purification of hydrophobic compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

ANION EXCHANGE PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

- Small Particle (5-20 µm)
- Intermediate Particle (25-40 µm)
- Standard Particle (40-63 µm)
- Large Particle (80-200 µm)



PSA (n-2, Aminoethyl)			
PART NUMBER UNENCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUPSA1L1	—	50 mg/1 mL	100
EUPSA111	—	100 mg/1 mL	100
EUPSA123	—	200 mg/3 mL	50
EUPSA153	—	500 mg/3 mL	50
EUPSA156	—	500 mg/6 mL	50
EUPSA1M6	—	1000 mg/6 mL	30
EUPSA11Z	—	100 mg/10 mL	50
EUPSA12Z	—	200 mg/10 mL	50
EUPSA15Z	—	500 mg/10 mL	50
EUPSA12M15	—	2000 mg/15 mL	20
EUPSA15M25	—	5000 mg/25 mL	20
EUPSA110M75	—	10,000 mg/75 mL	10

% Organic Loading: 11.00

Application:

Scavenger for acids, cyclic compounds, cholesterol, and other lipid type compounds.

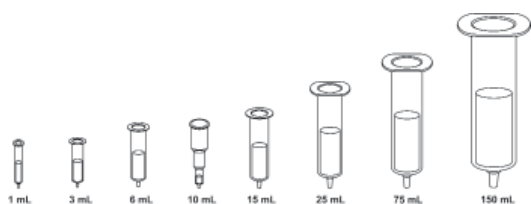
FACTS

- Polynuclear aromatic hydrocarbons (PAH's) are residual products from the incomplete combustion of fuels
- Almost any compound can be extracted using SPE
- Carbon used for solid-phase extraction may be in either of two forms, ACTIVATED or GRAPHITIZED



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

CATION EXCHANGE PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (25-40 μm)
 Standard Particle (40-63 μm)
 Large Particle (80-200 μm)

Carboxylic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCCX1L1	–	50 mg/1 mL	100
EUCCX111	–	100 mg/1 mL	100
EUCCX123	–	200 mg/3 mL	50
EUCCX153	–	500 mg/3 mL	50
EUCCX156	–	500 mg/6 mL	50
EUCCX1M6	–	1000 mg/6 mL	30
EUCCX11Z	–	100 mg/10 mL	50
EUCCX12Z	–	200 mg/10 mL	50
EUCCX15Z	–	500 mg/10 mL	50
EUCCX12M15	–	2000 mg/15 mL	20
EUCCX15M25	–	5000 mg/25 mL	20
EUCCX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 9.10

Application:

Scavenger for strong amines with quaternary amines.

Propylsulfonic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUPCX1L1	–	50 mg/1 mL	100
EUPCX111	–	100 mg/1 mL	100
EUPCX123	–	200 mg/3 mL	50
EUPCX153	–	500 mg/3 mL	50
EUPCX156	–	500 mg/6 mL	50
EUPCX1M6	–	1000 mg/6 mL	30
EUPCX11Z	–	100 mg/10 mL	50
EUPCX12Z	–	200 mg/10 mL	50
EUPCX15Z	–	500 mg/10 mL	50
EUPCX12M15	–	2000 mg/15 mL	20
EUPCX15M25	–	5000 mg/25 mL	20
EUPCX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 7.10

Application:

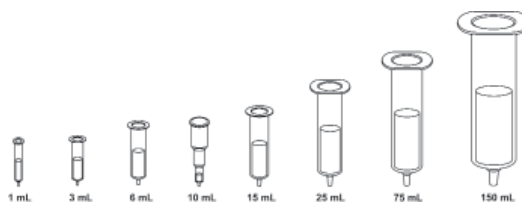
Scavenger for amines, alcohols and other nucleophiles.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

CATION EXCHANGE PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (25-40 µm)
Standard Particle (40-63 µm)
Large Particle (80-200 µm)



Benzenesulfonic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUBCX1L1	–	50 mg/1 mL	100
EUBCX111	–	100 mg/1 mL	100
EUBCX123	–	200 mg/3 mL	50
EUBCX153	–	500 mg/3 mL	50
EUBCX156	–	500 mg/6 mL	50
EUBCX1M6	–	1000 mg/6 mL	30
EUBCX11Z	–	100 mg/10 mL	50
EUBCX12Z	–	200 mg/10 mL	50
EUBCX15Z	–	500 mg/10 mL	50
EUBCX12M15	–	2000 mg/15 mL	20
EUBCX15M25	–	5000 mg/25 mL	20
EUBCX110M75	–	10,000 mg/75 mL	10

% Organic Loading: 11.00

Application:

Scavenger for amines, alcohols and other nucleophiles.

Benzenesulfonic Acid – High Load			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUBCX1HL11	–	100 mg/1 mL	100
EUBCX1HL23	–	200 mg/3 mL	50
EUBCX1HL53	–	500 mg/3 mL	50
EUBCX1HL56	–	500 mg/6 mL	50
EUBCX1HLM6	–	1000 mg/6 mL	30
EUBCX1HL1Z	–	100 mg/10 mL	50
EUBCX1HL2Z	–	200 mg/10 mL	50
EUBCX1HL5Z	–	500 mg/10 mL	50
EUBCX1HL2M15	–	2000 mg/15 mL	20
EUBCX1HL5M25	–	5000 mg/25 mL	20
EUBCX1HL10M75	–	10,000 mg/75 mL	10

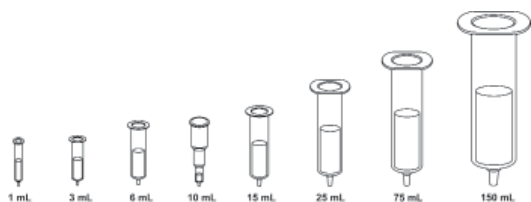
% Organic Loading: 16.00

Application:

Scavenger for amines, alcohols and other nucleophiles.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

CATION EXCHANGE PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

- Small Particle (5-20 µm)
- Intermediate Particle (25-40 µm)
- Standard Particle (40-63 µm)
- Large Particle (80-200 µm)

Triacetic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUTAX1L1	—	50 mg/1 mL	100
EUTAX111	—	100 mg/1 mL	100
EUTAX123	—	200 mg/3 mL	50
EUTAX153	—	500 mg/3 mL	50
EUTAX156	—	500 mg/6 mL	50
EUTAX1M6	—	1000 mg/6 mL	30
EUTAX11Z	—	100 mg/10 mL	50
EUTAX12Z	—	200 mg/10 mL	50
EUTAX15Z	—	500 mg/10 mL	50
EUTAX12M15	—	2000 mg/15 mL	20
EUTAX15M25	—	5000 mg/25 mL	20
EUTAX110M75	—	10,000 mg/75 mL	10

% Organic Loading: 7.61

Application:

Chelator for metal ions.

- i.e.
- tin
 - palladium
 - copper
 - ruthenium
 - chromium
 - nickel

EXTRACTION AND TROUBLESHOOTING TIPS

Common SPE Errors:

- Sample extracted too rapidly—remedy, reduce vacuum setting
- Testing the pH of water with pH paper—remedy, use pH meter
- Over drying of the extract—remedy, reduce time in evaporator or N2 flow and temperature of bath
- Over drying of the sorbent in the cartridge after extraction—remedy, reduce vacuum setting or dry time

ENVIRO-CLEAN®

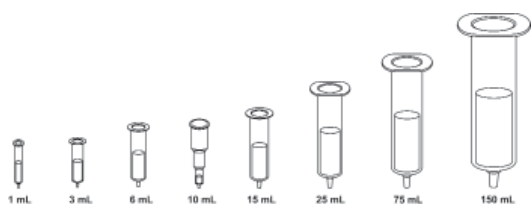
EUBCX1HL2Z

UCT ENVIRO-CLEAN® ion exchange sorbents are manufactured with a unique bonding technology that renders our sorbents resistant to extreme pH. These UCT products are available in a wide range of sizes, sorbent types and quantities to fill any ion exchange requirement.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

COPOLYMERIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (25-40 μm)
 Standard Particle (40-63 μm)
 Large Particle (80-200 μm)

Hydrophobic Plus Cyclohexyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUCYH211	—	100 mg/1 mL	100
EUCYH223	—	200 mg/3 mL	50
EUCYH253	—	500 mg/3 mL	50
EUCYH256	—	500 mg/6 mL	50
EUCYH2M6	—	1000 mg/6 mL	30
EUCYH21Z	—	100 mg/10 mL	50
EUCYH22Z	—	200 mg/10 mL	50
EUCYH25Z	—	500 mg/10 mL	50
EUCYH22M15	—	2000 mg/15 mL	20
EUCYH25M25	—	5000 mg/25 mL	20
EUCYH210M75	—	10,000 mg/75 mL	10

% Organic Loading: 11.00

Application:

Dual functionality for phenols and hydrophobic compounds.

Hydrophobic Plus Cyanopropyl

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUCNP211	—	100 mg/1 mL	100
EUCNP223	—	200 mg/3 mL	50
EUCNP253	—	500 mg/3 mL	50
EUCNP256	—	500 mg/6 mL	50
EUCNP2M6	—	1000 mg/6 mL	30
EUCNP21Z	—	100 mg/10 mL	50
EUCNP22Z	—	200 mg/10 mL	50
EUCNP25Z	—	500 mg/10 mL	50
EUCNP22M15	—	2000 mg/15 mL	20
EUCNP25M25	—	5000 mg/25 mL	20
EUCNP210M75	—	10,000 mg/75 mL	10

% Organic Loading: 14.60

Application:

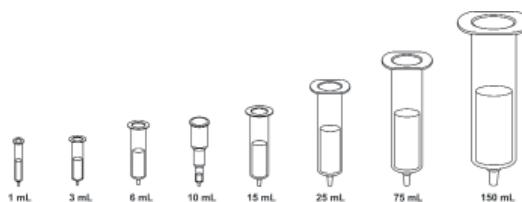
Dual functionality for polar and hydrophobic compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

COPOLYMERIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 µm)
Intermediate Particle (25-40 µm)
Standard Particle (40-63 µm)
Large Particle (80-200 µm)



Hydrophobic Plus Propylsulfonic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUPCX2L1	–	50 mg/1 mL	100
EUPCX211	–	100 mg/1 mL	100
EUPCX223	–	200 mg/3 mL	50
EUPCX253	–	500 mg/3 mL	50
EUPCX256	–	500 mg/6 mL	50
EUPCX2M6	–	1000 mg/6 mL	30
EUPCX21Z	–	100 mg/10 mL	50
EUPCX22Z	–	200 mg/10 mL	50
EUPCX25Z	–	500 mg/10 mL	50
EUPCX22M15	–	2000 mg/15 mL	20
EUPCX25M25	–	5000 mg/25 mL	20
EUPCX210M75	–	10,000 mg/75 mL	10

% Organic Loading: 14.62

Application:

Dual functionality for weak bases and hydrophobic compounds.

Hydrophobic Plus Carboxylic Acid			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUCCX2L1	–	50 mg/1 mL	100
EUCCX211	–	100 mg/1 mL	100
EUCCX223	–	200 mg/3 mL	50
EUCCX253	–	500 mg/3 mL	50
EUCCX256	–	500 mg/6 mL	50
EUCCX2M6	–	1000 mg/6 mL	30
EUCCX21Z	–	100 mg/10 mL	50
EUCCX22Z	–	200 mg/10 mL	50
EUCCX25Z	–	500 mg/10 mL	50
EUCCX22M15	–	2000 mg/15 mL	20
EUCCX25M25	–	5000 mg/25 mL	20
EUCCX210M75	–	10,000 mg/75 mL	10

% Organic Loading: 11.80

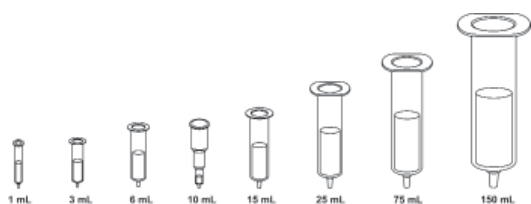
Application:

Dual functionality for strong bases and hydrophobic compounds.



ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

COPOLYMERIC PRODUCT GUIDE



Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (25-40 μm)
 Standard Particle (40-63 μm)
 Large Particle (80-200 μm)

Hydrophobic Plus Benzenesulfonic Acid

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUBCX2L1	–	50 mg/1 mL	100
EUBCX211	–	100 mg/1 mL	100
EUBCX223	–	200 mg/3 mL	50
EUBCX253	–	500 mg/3 mL	50
EUBCX256	–	500 mg/6 mL	50
EUBCX2M6	–	1000 mg/6 mL	30
EUBCX21Z	–	100 mg/10 mL	50
EUBCX22Z	–	200 mg/10 mL	50
EUBCX25Z	–	500 mg/10 mL	50
EUBCX22M15	–	2000 mg/15 mL	20
EUBCX25M25	–	5000 mg/25 mL	20
EUBCX210M75	–	10,000 mg/75 mL	10

% Organic Loading: 12.30

Application:

Dual functionality for weak bases and hydrophobic compounds.

Hydrophobic Plus Quaternary Amine

PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUQAX2L1	–	50 mg/1 mL	100
EUQAX211	–	100 mg/1 mL	100
EUQAX223	–	200 mg/3 mL	50
EUQAX253	–	500 mg/3 mL	50
EUQAX256	–	500 mg/6 mL	50
EUQAX2M6	–	1000 mg/6 mL	30
EUQAX21Z	–	100 mg/10 mL	50
EUQAX22Z	–	200 mg/10 mL	50
EUQAX25Z	–	500 mg/10 mL	50
EUQAX22M15	–	2000 mg/15 mL	20
EUQAX25M25	–	5000 mg/25 mL	20
EUQAX210M75	–	10,000 mg/75 mL	10

% Organic Loading: 12.80

Application:

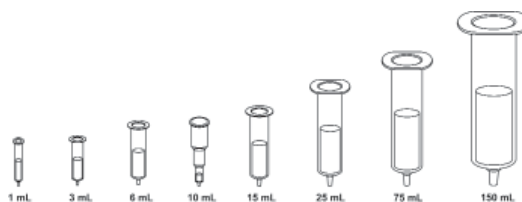
Dual functionality for weak acids and hydrophobic compounds.

ENVIRO-CLEAN® SOLID PHASE EXTRACTION CARTRIDGES

COPOLYMERIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (25-40 μm)
 Standard Particle (40-63 μm)
 Large Particle (80-200 μm)



Hydrophobic Plus Aminopropyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUNAX2L1	—	50 mg/1 mL	100
EUNAX211	—	100 mg/1 mL	100
EUNAX223	—	200 mg/3 mL	50
EUNAX253	—	500 mg/3 mL	50
EUNAX256	—	500 mg/6 mL	50
EUNAX2M6	—	1000 mg/6 mL	30
EUNAX21Z	—	100 mg/10 mL	50
EUNAX22Z	—	200 mg/10 mL	50
EUNAX25Z	—	500 mg/10 mL	50
EUNAX22M15	—	2000 mg/15 mL	20
EUNAX25M25	—	5000 mg/25 mL	20
EUNAX210M75	—	10,000 mg/75 mL	10

% Organic Loading: 12.30

Application:

Dual functionality for strong acids and hydrophobic compounds.

EXTRACTION AND TROUBLESHOOTING TIPS

Low Recovery:

- Column may not be conditioned properly. Recondition with activation solvent and do not let the column dry out
- After conditioning, pass 1 to 2 bed volumes of solvent similar in composition to the actual sample—generally water or buffer—through the cartridge
- Switch to a sorbent that has a greater affinity for the analyte
- Reduce strength of wash solvent after sample extraction
- Analyte may be bound to the sorbent and require a stronger elution solvent



ENVIRO-CLEAN® INERT GLASS SYRINGE BARRELS

Inert 6 mL Glass Syringe Barrels are available.
Contact your regional sales representative for
product code and pricing.



INERT GLASS SYRINGE BARRELS - SPE CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

- Small Particle (5-20 μm)
- Intermediate Particle (25-40 μm)
- Standard Particle (40-63 μm)
- Large Particle (80-200 μm)



6 mL

C8, Octyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUC08156G	EEC08156G	500 mg/6 mL	30
EUC081M6G	EEC081M6G	1000 mg/6 mL	30

% Organic Loading: 11.10

Application:

Removes large or more hydrophobic compounds.

C18, Octadecyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUC18156G	EEC18156G	500 mg/6 mL	30
EUC181M6G	EEC181M6G	1000 mg/6 mL	30

% Organic Loading: 21.60

Application:

Removes large or more hydrophobic compounds.



INERT GLASS SYRINGE BARRELS - SPE CARTRIDGES

HYDROPHOBIC PRODUCT GUIDE



6 mL

Sorbents are offered in the following particle sizes:

- Small Particle (5-20 μm)
- Intermediate Particle (25-40 μm)
- Standard Particle (40-63 μm)
- Large Particle (80-200 μm)

C30, Tricontyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUC30156G	EEC30156G	500 mg/6 mL	30
EUC301M6G	EEC301M6G	1000 mg/6 mL	30

% Organic Loading: 24.30

Application:

Removes large or more hydrophobic compounds.

Cyclohexyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUCYH1M6G	EECYH1M6G	1000 mg/6 mL	30

% Organic Loading: 11.00

Application:

Removes large or more hydrophobic compounds.

Phenyl			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUPHY1M6G	EEPHY1M6G	1000 mg/6 mL	30

% Organic Loading: 10.80

Application:

Scavenger for phenolic compounds.

INERT GLASS SYRINGE BARRELS - SPE CARTRIDGES

HYDROPHILIC PRODUCT GUIDE

Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
 Intermediate Particle (25-40 μm)
 Standard Particle (40-63 μm)
 Large Particle (80-200 μm)



6 mL

Unbonded Silica (Acid Washed)			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EUSIL156G	-	500 mg/6 mL	30
EUSIL1M6G	-	1000 mg/6 mL	30

% Organic Loading: 4.00

Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

High-Surface Area Activity Silica			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/ TUBE VOL.	UNITS
EPHSIL156G	-	500 mg/6 mL	30
EPHSIL1M6G	-	1000 mg/6 mL	30

% Organic Loading: 4.00

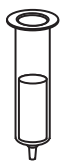
Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.



INERT GLASS SYRINGE BARRELS - SPE CARTRIDGES

HYDROPHILIC PRODUCT GUIDE



6 mL

Sorbents are offered in the following particle sizes:

Small Particle (5-20 μm)
Intermediate Particle (25-40 μm)
Standard Particle (40-63 μm)
Large Particle (80-200 μm)

Diol			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUDEL1M6G	-	1000 mg/6 mL	30

% Organic Loading: 8.00

Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

Florisol®			
PART NUMBER UNENDCAPPED	PART NUMBER ENDCAPPED	AMT. SORBENT/TUBE VOL.	UNITS
EUFLS156G	-	500 mg/6 mL	30
EUFLS1M6G	-	1000 mg/6 mL	30

% Organic Loading: N/A

Application:

Removes hydrophilic (polar) impurities, purification of hydrophilic (polar) compounds.

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EXTRACTION AND TROUBLESHOOTING TIPS

Slow Flow or Plugging:

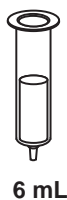
- Sample may be high in suspended solids--Dilute sample by a known amount and re-extract sample
- Load less sample
- Check vacuum setting and increase vacuum
- Add glass wool to the top of the cartridge for high suspended solid samples

Oil and Grease Cartridge:

- Use glass wool with sodium sulfate when drying the hexane extract---filter paper may absorb oil and grease reducing recovery
- Always use gloves when handling vials as skin oils will affect recovery



GLASS TUBES AND PTFE FRITS



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GLASS TUBES				
PART NUMBER	TUBE DESCRIPTION	TUBE VOLUME	FRIT DESCRIPTION	QUANTITY
RFV008G	Empty glass tubes	6 mL	None	30
RFV01F8G	Glass tube	6 mL	1 PTFE frit inserted	30

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GLASS TUBES				
PART NUMBER	TUBE DESCRIPTION	TUBE VOLUME	FRIT DESCRIPTION	QUANTITY
FR10081T	None	6 mL	PTFE frit 10 porosity	60

ENVIRO CLEAN[®] RESERVOIRS & FRITS

Reservoirs: UCT manufactures a wide range of highly reproducible cartridges from our proprietary polypropylene allowing the chemist a consistent extraction technique virtually free of extractables. Sizes available include 1mL, 3mL, 6mL, 10mL, 15mL, 25mL, 75mL, and 150mL.

Frits: Polyethylene or PTFE frits are available with 10 μ m or 20 μ m pore sizes.



RESERVOIRS

FRITTED RESERVOIRS; 1 FRIT, 10 MICRON POROSITY; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFV01F1P	1 mL capacity	50	\$35.00
RFV01F4P	4 mL capacity	50	\$37.00
RFV01F8P	8 mL capacity	50	\$39.00
RFV1F10P	10 mL capacity	50	\$50.00
RFV1F15P	15 mL capacity	50	\$48.00
RFV1F25P	25 mL capacity	50	\$50.00
RFV1F75P	75 mL capacity	20	\$27.00

FRITTED RESERVOIRS; 1 FRIT, 20 MICRON POROSITY; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFT01F1P	1 mL capacity	50	\$35.00
RFT01F4P	4 mL capacity	50	\$37.00
RFT01F8P	8 mL capacity	50	\$39.00
RFT1F10P	10 mL capacity	50	\$50.00
RFT1F15P	15 mL capacity	50	\$48.00
RFT1F25P	25 mL capacity	20	\$50.00
RFT1F75P	75 mL capacity	20	\$27.00

FRITTED FLANGELESS RESERVOIRS; 1 FRIT, 20 MICRON POROSITY; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFT01FR3P	4 mL capacity	50	\$37.00

FRITTED RESERVOIRS; 2 FRIT, 10 MICRON POROSITY; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFV02F1P	1 mL capacity	50	\$37.00
RFV02F4P	4 mL capacity	50	\$40.00
RFV02F8P	8 mL capacity	50	\$42.00
RFV2F10P	10 mL capacity	50	\$55.00
RFV2F15P	15 mL capacity	50	\$51.00
RFV2F25P	25 mL capacity	50	\$53.00
RFV2F75P	75 mL capacity	20	\$30.00

EMPTY RESERVOIRS; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFV0001P	1 mL capacity	50	\$17.00
RFV0004P	4 mL capacity	50	\$18.00
RFV0008P	8 mL capacity	50	\$20.00
RFV0010P	10 mL capacity	50	\$34.00
RFV0015P	15 mL capacity	50	\$25.00
RFV0025P	25 mL capacity	50	\$26.00
RFV0075P	75 mL capacity	20	\$28.00
RFV00150P	150 mL capacity	10	\$69.00

EMPTY FLANGELESS TUBE; STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
RFT00R3P	4 mL capacity	50	\$27.00

FRITS

POROUS POLYETHYLENE 10 MICRON POROSITY (1/16" THICKNESS); STANDARD CONFIGURATION

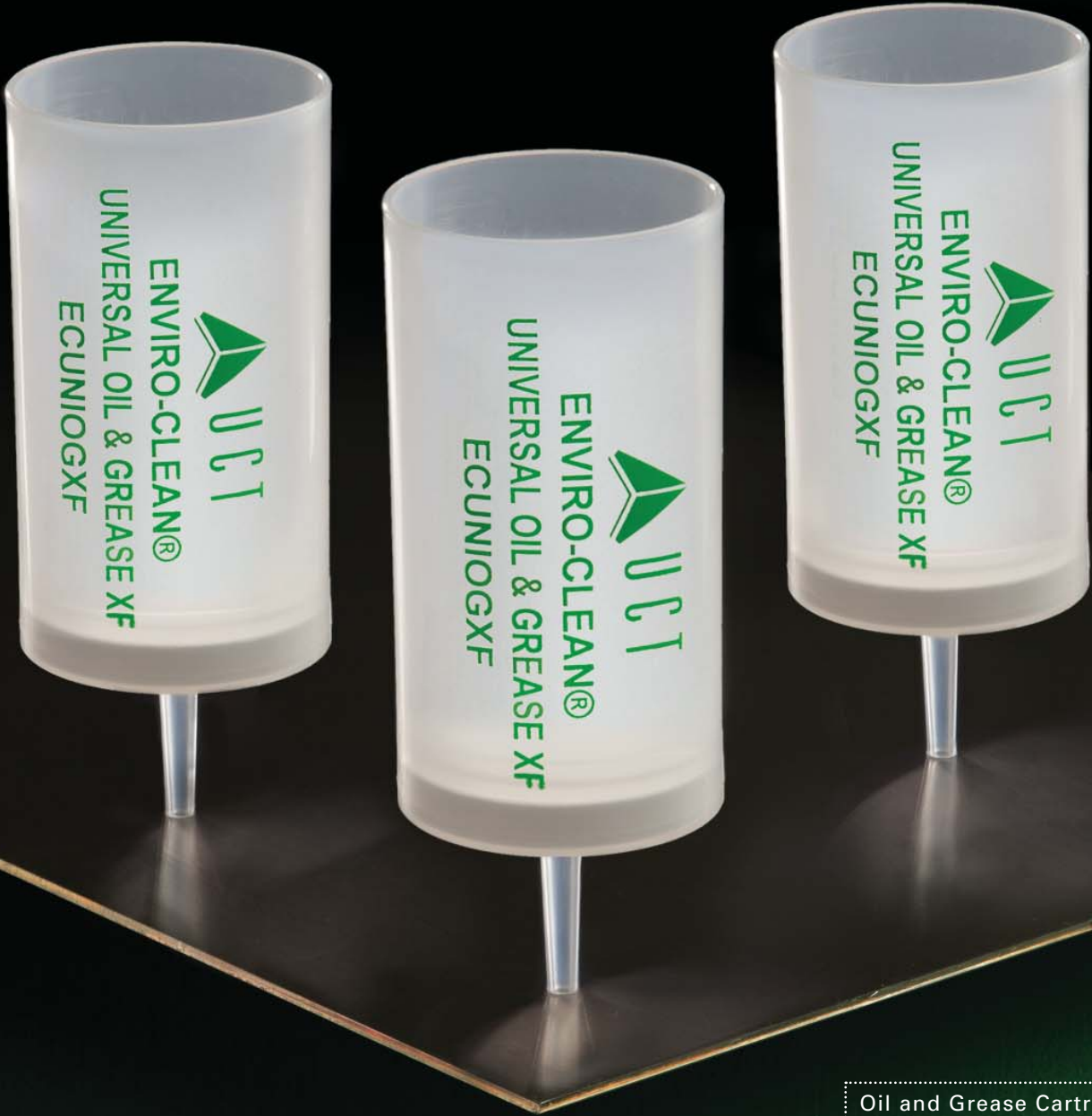
PART NUMBER	DESCRIPTION	UNITS	PRICE
FR10011P	1 mL capacity	100	\$26.00
FR10041P	4 mL capacity	100	\$29.00
FR10081P	8 mL capacity	100	\$31.00
FR10101P	10 mL capacity	100	\$32.00
FR10151P	15 mL capacity	100	\$33.00
FR10251P	25 mL capacity	100	\$36.00
FR10751P	75 mL capacity	100	\$38.00

POROUS POLYETHYLENE 20 MICRON POROSITY (1/16" THICKNESS); STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
FR20011P	1 mL capacity	100	\$26.00
FR20041P	4 mL capacity	100	\$29.00
FR20081P	8 mL capacity	100	\$31.00
FR20101P	10 mL capacity	100	\$32.00
FR20151P	15 mL capacity	100	\$33.00
FR20251P	25 mL capacity	100	\$36.00
FR20751P	75 mL capacity	100	\$38.00

POROUS POLYETHYLENE 20 MICRON POROSITY (1/8" THICKNESS); STANDARD CONFIGURATION

PART NUMBER	DESCRIPTION	UNITS	PRICE
FT20011P	1 mL capacity	100	\$26.00
FT20041P	4 mL capacity	100	\$29.00
FT20081P	8 mL capacity	100	\$31.00
FT20101P	10 mL capacity	100	\$32.00
FT20151P	15 mL capacity	100	\$33.00
FT20251P	25 mL capacity	100	\$36.00
FT20751P	75 mL capacity	100	\$38.00



Oil and Grease Cartridge
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