

BIO-CONEXT® BIOMOLECULAR ATTACHMENT

Your easy link between solid support and permanent immobilization.

TRIALKOXY SILANE ALDEHYDE

$$-O-Si-(CH2)n-C-H$$

M / NH₂

The aldehydic functional groups will readily react with primary amines found on most macromolecules.

Antibodies
Enzymes
Peptides
Proteins
Small Molecules

Part No. PSX1050 PSX1055 Name
TRIMETHOXY SILANE ALDEHYDE
TRIETHOXY SILANE ALDEHYDE

- For research and development usage
- PSX1050 is more hydrolytically active than PSX1055
- Each container is packed under nitrogen in a septa vial
- Protect from moisture and air
- Shelf life is 6 months from the date of shipment

THE BENEFITS OF USING BIO-CONEXT®

BIO-CONEXT® Provides Universal Surface Reactivity

Trialkoxy silane aldehydes will easily create a covalent linkage with most active glass, siliceous, metal and some plastic surfaces.



BIO-CONEXT® Coats Surfaces Completely

One mole of silane will theoretically cover 7,500 square meters. Approximately 1 gram of PSX1050 will coat 39 square meters and 1 gram of PSX1055 will cover 32 square meters.

BIO-CONEXT® Demonstrates Ultra-High Loading

A 2% solution of aldehydic alkoxy silanes will typically form 3 to 8 molecular layers on the reacted surface. This creates a very dense population of aldehyde groups providing extremely high ligand binding and activity.

BIO-CONEXT® Bonding Superior to Classical Technique

The classical procedure for ligand attachment requires reacting amine functional supports with glutaraldehyde. These techniques are more labor intensive and expensive, as well as, glutaraldehyde is unstable and difficult to purify. Additionaly, the glutaraldehyde and primary amine form two Schiff bases, with only one formed with the aldehydic silane coupling. As a result, there is a greater stability and less denaturing over time with BIO-CONEXT®.

BIO-CONEXT® Gives the Chemist Total Flexibility

BIO-CONEXT® silane chemistry provides you with a considerable number of choices for selecting coupling surfaces. Now you can bind your ligand to the support that meets your most demanding specifications with BIO-CONEXT®.

LITERATURE REFERENCES

Lee S., Mitchell D., Trofin L., Nevanen T., Soderlund H., Martin C., "Antibody-Based Bio-Nanotube Membranes for Enantomeric Drug Separations", Science, Vol 296, Issue 5576, 2198-2200 (2002)

Yang H., Zhang S., Tan F., Zhaung Z., Wang X., "Surface Molecularly Imprinted Nanwires for Biorecognition". J. Am. Chem. Soc. 2005, 127, 1378-1379

SPECIALTIES

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. Bristol, PA 19007. 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.

SHIPMENTS

Normal process is shipment within one business day after receipt of an order if material is in stock. Unless special shipping arrangements are made, all orders will be sent via Federal Express Ground. Shipping and handling charges (freight, insurance, hazardous materials fee) will be added to the invoice unless requested by the customer.

SPECIAL PRICING

We offer special pricing for volume purchases and standing orders. Please call a sales representative for more information on special pricing qualifications.

RETURN POLICY

Our sales staff will process your return. Before returning merchandise, please call to obtain a return authorization number from a sales representative. We will need to know the reason for the return, date of purchase, purchase order number, invoice number, catalog number and lot number of product returned in order to issue a return authorization number.

WARRANTY

All products manufactured by UCT Specialties, LLC are guaranteed against defects in materials or workmanship for a period of 90 days from shipment. UCT Specialties, LLC will replace any items that prove to be defective during that time period.

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

This warranty does not apply to damage resulting from misuse.

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