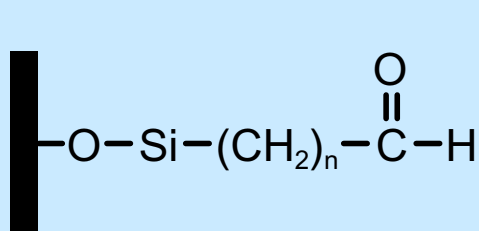


# BIO-CONEXT®

Your easy link between solid support  
and permanent immobilization

## TRIALKOXY SILANE ALDEHYDE



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

**M =**

- Antibodies
- Enzymes
- Peptides
- Proteins
- Small Molecules

Part Number  
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



UNITED CHEMICAL TECHNOLOGIES, INC.

2731 Bartram Road, Bristol, PA 19007

800-385-3153 • Fax: 215-785-1226 • [www.unitedchem.com](http://www.unitedchem.com)

# 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. Additionally, 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**

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



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