

SiSiB® PC1310 SILANE

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CHEMICAL NAME

Diethylenetriaminopropyltriethoxysilane

Synonym: N-(3-triethoxysilylpropyl)diethylenetriamine

N-[N'-(2-aminoethyl)aminoethyl]-3-aminopropyl-triethoxysilane

CHEMICAL STRUCTURE

$$\begin{array}{c|c} H & OC_2H_5 \\ \hline \\ H_2N - (CH_2)_2 - N - (CH_2)_2 - N - (CH_2)_3 - Si - OC_2H_5 \\ \hline \\ H & OC_2H_5 \end{array}$$

INTRODUCTION

SiSiB® PC1310 is an organofunctional silane possessing three reactive amino groups and a hydrolyzable triethoxysilyl group. Due to the nature of its amino group, this substance reacts as a strong base. The silane hydrolyzes autocatalytically in the presence of moisture (ethanol is released) to form silanols, which can then react with themselves to produce siloxanes or can bind to inorganic substrates. As a bifunctional organosilane, it can also interact with numerous organic polymers and thus function as a molecular bridge (adhesion promoter, surface modifier) between organic and inorganic substrates.

SiSiB® PC1310 is a clear to straw liquid with a slight amine-like odor. It is soluble in alcohols, ketones, esters and aliphatic and aromatic hydrocarbon solvents.

APPLICATIONS

SiSiB® PC1310 can be used as an adhesion promoter in sealants, adhesives and coatings.

SiSiB® PC1310 can be used as a surface modifier for fillers.

SiSiB® PC1310 can be used in the production of silyl-modified polymers which serve as binders in adhesives and sealants.

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SiSiB[®] PC1310 SILANE

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TYPICAL PHYSICAL PROPERTIES

CAS No.	N/A
EINECS No.	N/A
Formula	$C_{13}H_{33}N_3O_3Si$
Molecular Weight	307.50
Boiling Point	369°C [760mmHg]
Flash Point	177°C
Color and Appearance	Clear to straw liquid
Density _{25/25°C}	0.963
Refractive Index	1.457 [25°C]
Purity:	Min.95.0%

PACKING AND STORAGE

SiSiB® PC1310 is supplied in 180Kg steel drum or 900Kg IBC tote.

In the unopened original container SiSiB® PC1310 has a shelf life of one year in a dry and cool place.

Notes

All information in the leaflet is based on our present knowledge and experience. We reserve the right to make any changes according to technological progress or further developments. Performance of the product described herein should be verified by testing.

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Please send all technical questions concerning quality and product safety to: silanes@SiSiB.com.



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