

SiSiB® PC2521 SILANE

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CHEMICAL NAME

gamma-Ureidopropyltriethoxysilane (50% in Methanol)

CHEMICAL STRUCTURE

$$\begin{array}{c|c} O & OC_2H_5\\ H_2N & C & N & (CH_2)_3 & Si & OC_2H_5\\ & & & \\$$

INTRODUCTION

SiSiB® PC2521 is a bifunctional organosilane having a reactive organic ureido group and a hydrolyzable inorganic triethoxysilyl group. The dual nature of its reactivity allows SiSiB® PC2521 to bind chemically to both inorganic materials (e.g. glass, metals, fillers) and organic polymers (e.g. thermosets, thermoplastics, elastomers), functioning as an adhesion promoter and as a surface modifier. SiSiB® PC2521 is a 50% solution of silane in methanol; it is a colorless liquid with an alcohol-like odor and is soluble in alcohols, ketones, esters or aromatic hydrocarbons.

TYPICAL PHYSICAL PROPERTIES

CAS No.	116912-64-2 or 23779-32-0
EINECS No.	245-876-7
Formula	C ₁₀ H ₂₄ N ₂ O ₄ Si
Molecular Weight	264.4
Boiling Point	No data °C [760mmHg]
Flash Point	14°C
Color and Appearance	Colorless transparent liquid
Density _{25/25°C}	0.920
Refractive Index	1.386[25°C]
Purity:	50% in Methanol

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We also can supply pure gamma-Ureidopropyltriethoxysilane (CAS 23779-32-0) without methanol solvent.

APPLICATIONS

SiSiB® PC2521 can be used with such polymers as epoxy, phenolic, furan and melamine resins, polyurethanes, PA, PBT, PE, EVA, PP, PVB, PVAC, acrylics and silicones.

SiSiB® PC2521 can be used as a size constituent of finish for glass fiber/glass fabric composites.

SiSiB® PC2521 can be used as an additive to phenolic, furan and melamine resins for foundry resins and abrasives.

SiSiB® PC2521 can be used as an additive for sealants and adhesives.

SiSiB® PC2521 can be used as an additive and/or primer for paints and varnishes to improve adhesion to the substrate.

The most important effects which can be achieved using PC2521 are improvements in product properties, such as:

Improved mechanical properties: e.g. flexural strength, tensile strength, impact strength, modulus of elasticity.

Improved resistance to moisture and corrosion.

Higher temperature of deflection under load.

PACKING AND STORAGE

SiSiB® PC2521 is supplied in 180Kg steel drum.

In the unopened original container SiSiB® PC2521 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.

