

PROSILANE™ SC-1300

DIETHYLENETRIAMINOPROPYLTRIMETHOXYSILANE

PRODUCT DESCRIPTION

SC-1300 is an organofunctional silane possessing three reactive amino groups and a hydrolyzable trimethoxysilyl group. Due to the nature of its amino group, this substance reacts as a strong base.

SC-300 is a clear, light to dark yellow liquid with a slight amine-like odor. It is soluble in alcohols, ketones, esters and aliphatic and aromatic hydrocarbon solvents.

TYPICAL PRODUCT DATA*		
Property	Unit	Typical Value
CAS\$	-	35141-30-1
Molecular Weight	g/mol	265.43
Formula		C ₁₀ H ₂₇ N3O ₃ Si
Appearance	-	Clear, light to dark yellow liquid
Boiling Point	°C	116
Flash Point	°C	137
Refractive Index	-	1.458
Density	g/cm ³	1.031
Purity	%	≥90%

^{*}These values are not intended to be used as specifications but as suggested characteristics

PACKAGING

The size of the available packages can be checked with Sales Department. SC-1300 is typically supplied in 200kg steel drums or 1000kg IBC totes.

TECHNICAL DATA SHEET

$$\begin{array}{c|c} H & OCH_3 \\ \hline \\ H_2N & (CH_2)_2 & N & (CH_2)_2 & N & (CH_2)_3 & Si & OCH_3 \\ \hline \\ H & OCH_3 & \\ \end{array}$$

TYPICAL FEATURES AND APPLICATIONS

SC-1300 a Diethylenetriaminopropyltrimethoxysilane is a bifunctional organosilane compound that contains both amine and silane groups. The amine group allows for strong bonding to various materials, while the silane group facilitates adhesion to inorganic surfaces such as glass, metal, and minerals.

It is commonly used as a coupling agent, adhesion promoter in sealants, adhesives and coatings, specifically suited for plastisol sealants.

SC-1300 can be used as a surface modifier for fillers and can also be used in the production of silyl-modified polymers which serve as binders in adhesives and sealants.

INFORMATION FOR USE

The silane hydrolyzes autocatalytically in the presence of moisture (methanol 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.

SHELF LIFE AND STORAGE

In the unopened original container SC-1300 has a shelf life of one year in a dry and cool place.

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ SAFETY DATA SHEET AND CONTAINER LABELS FOR SAFE USE. PHYSICAL, ENVIRONMENTAL, AND HEALTH HAZARD INFORMATION.

LIMITATIONS: Not intended for human injection. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

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