

PROSILANE™ SC-3500

2-(3,4-EPOXYCYCLOHEXYL)-ETHYLTRIMETHOXYSILANE

PRODUCT DESCRIPTION

SC-3500 is a versatile organosilane compound containing an epoxyfunctional cyclohexyl group and trimethoxysilane moiety. It serves as a coupling agent, adhesion promoter, and surface modifier for improving the bond between organic and inorganic materials.

TYPICAL PRODUCT DATA* Unit **Property Typical Value** CAS\$ 3388-04-3 Molecular Weight g/mol 264.38 Formula C11H22O4Si Colorless clear liquid **Appearance Boiling Point** $^{\circ}C$ 310 Flash Point $^{\circ}C$ 112 Refractive Index 1.427 Density g/cm³ 1.069 Purity % ≥98%

PACKAGING

The size of the available packages can be checked with Sales Department. SC-3500 is typically supplied in 200kg steel drums or 1000kg IBC totes.

TECHNICAL DATA SHEET

$$\begin{array}{c|c} & \text{OCH}_3 \\ \hline \\ \text{OCH}_2)_2 & \begin{array}{c} \text{Si} \\ \\ \text{OCH}_3 \end{array} \end{array}$$

TYPICAL FEATURES AND APPLICATIONS

SC-3500 has a more reactive epoxy group when compared to the more common SC-3100. This enhanced reactivity is due to the added strain put on the epoxy group by the presence of the second ring; the cyclohexyl.

The increased epoxy reactivity combined with the greater organic character from the cyclohexyl group often results in enhanced mechanical properties and better wet-strength retention of properties when compared to SC-3100.

SC-3500 can be used to improve dry and wet strength in cured composites reinforced with glass fiber rovings.

INFORMATION FOR USE

SC-3500 can be used to enhance wet electrical properties of epoxy-based encapsulate and packaging materials. It can be used to eliminate the need for a separate primer in polysulfide and urethane sealants. SC-3500 can be used to improve adhesion in waterborne acrylic sealants and in urethane and epoxy coatings.

Caution: SC-3500 is soluble in water after hydrolysis, alcohol, acetone and most aliphatic esters at normal application levels under five percent. Hydrolysis releases methanol.

SHELF LIFE AND STORAGE

In the unopened original container SC-3500 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.

Limited Warranty: Silsource Inc. warrants to Buyer that for a period of 12 months from the date of manufacture of the products, such products will materially conform to Silsource Inc.'s specifications in effect as of the date of manufacture. This warranty does not apply where the products have (a) been subjected to abuse, misuse, neglect, negligence, accident, improper testing, improper installation, improper storage, improper handling, abnormal physical stress, abnormal environmental conditions, or use contrary to any instructions issued by Silsource Inc.; (b) been reconstructed, repaired, or altered by persons other than Silsource Inc. or its authorized representatives; or (c) been used with any third-party product or hardware that has not been previously approved in writing by Silsource Inc. Buyer's exclusive remedy for breach of the limited warranty shall be a refund of the purchase price or replacement of the product, at Silsource Inc.'s sole discretion.

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