

SILSOURCE SC-2200

Bis(3-triethoxysilylpropyl)disulfide

PRODUCT DESCRIPTION

SC-2200 is a light yellowish silane that is suitable for high temperature mixing in rubber applications

TYPICAL PRODUCT DATA

(not intended for use in preparing specifications)

<u>Property</u>	<u>Value</u>
CAS No	56706-10-6
Formula	$C_{18}H_{42}O_6S_2Si_2$
Molecular Weight	486
Appearance and Colour	Light yellowish liquid
Flash Point (°C)	Min. 120
Density (16/24°C)(g/cm³)	1.03 ± 0.02
S2 Content (%, HPLC)	80-90
Volatiles Components (%)	Max. 4.0
Chain Length Average (%)	2.05 - 2.35
Total Sulfur (%) (standard value)	13.3 - 15.5
Secondary Components:	Propyltriethoxysilane, ethanol, Chloroproplytriethoxysilane

OC_2H_5 OC_2H_5 C₂H₅O OC₂H₅ OC₂H₅ OC₂H₅ $X = 2.1 \sim 2.5$

TYPICAL FEATURES AND APPLICATIONS

In rubber applications, if the mixing temperature is too low there is not sufficient reinforcing effect. Silica dispersion is also reduced and this causes a reduction in the low heat buildup property, a strength of rubbers with silica. Also, the silane can be hydrolyzed and generated ethanol does not vaporize sufficiently so the ethanol vaporizes during the extrusion of the rubber. Blisters can form as a result. Alternatively, if the temperature is higher than 150°C when mixing, the reinforcing property is improved but polysulfide can carbolize and form free sulfur. The free sulfur will cause the rubber to vulcanize, so the gelation of the polymer reduces the rheological properties of the system. To prevent this it is necessary to reduce the content of high polysulfide silanes. SC-2200 has a structure that provides stability at high temperature and avoids the above noted issues so that rubber processing productivity is improved as well as low buildup property and abrasion resistance. Solubility: Soluble in Primary alcohols, ketones, benzene,

toluene, dimethylformaminde, chlorinated hydrocarbons, cetonitrile, dimethysulfoxide; Insoluble in Water

PACKAGING and STORAGE

SC-2200 is available in a 200 Kg. steel drum and 1000 Kgs. IBC container.

Store containers in a dry, cool place. Product has a shelf life of 12 months.

PRODUCT SAFETY INFORMATION

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEET AND CON-TAINER 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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Version: V2 Last updated: 02 24 2021