

# Si 69<sup>®</sup> Approval

## Bis[3-(triethoxysilyl)propyl]tetrasulfide

### Characteristic physico-chemical data

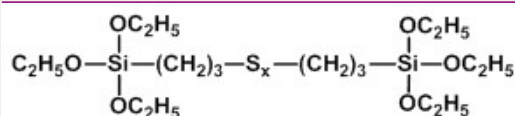
Properties and test methods	Value	Unit	Method
Sulfur content	22.5	%	SOP 2000-19
By-products, GC	≤ 3.5	%	ASTM D 6843
Average sulfur chain length, HPLC	3.70		ASTM D 6844
Average molecular weight	532	g/mol	calculated
Density	1.10	g/cm <sup>3</sup>	DIN 51757
Appearance	yellowish to reddish brown liquid		

### Registration

#### Si 69<sup>®</sup> Approval

AICS (Australia)	listed
DSL (Canada)	listed
IECSC (China)	listed
EC (Europe)	listed
ENCS (Japan)	listed
KECI (Korea)	listed
PICCS (Philippines)	listed
TECSI (Taiwan)	listed
TSCA (USA)	listed

Si 69<sup>®</sup> is a bifunctional, sulfur-containing organosilane for rubber applications in combination with white fillers containing silanol groups.



### Applications and properties

Si 69<sup>®</sup> reacts with silanol groups of white fillers during mixing and with the polymer during vulcanization under formation of covalent chemical bonds. This imparts greater tensile strength, higher moduli, reduced compression set, increased abrasion resistance and optimized dynamic properties. Si 69<sup>®</sup> is used in almost all fields of the rubber industry where hydroxy group-containing white fillers are used and optimum technical properties are required.

**Application fields are:** Low rolling resistance tires, mechanical rubber goods, shoe soles

The product is also available as a dry blend (1:1) with carbon black, named X 50-S<sup>®</sup>, as well as a pre-reacted precipitated silica with surface-modified called COUPSIL<sup>®</sup> 6109 (powder form) and COUPSIL<sup>®</sup> 8113 / COUPSIL<sup>®</sup> 8113 GR (powder and granulated form).

## Packaging and storage

### Si 69° - shelf life min. 12 months

The storage stability only applies to material stored under appropriate conditions (original unopened packaging, stored dry and frost-free and protected from direct sunlight).

We recommend using a thermo truck at temperatures <5° C.

Aqueous acids and bases accelerate the transformation of organosilanes to polymeric siloxanes. Therefore, organosilanes should be stored in a dry place, away from acids and bases.

The quality of this product can also be influenced by moisture (humidity). During handling and storage, please prevent humidity from entering the container. Keep container tightly closed during storage and close it immediately after use.

### Forms of supply:

1.000 kg IBC (PE)

200 kg PE drum - 800 kg pallet

25 kg PE pail - 800 kg pallet

## Safety and handling

Information concerning the safety of this product is listed in the corresponding Safety Data Sheet, which will be sent with the first delivery or upon renewal. Such information is also available from:

Evonik Operations GmbH, Product Safety Department, E-mail [sds-hu@evonik.com](mailto:sds-hu@evonik.com)

We recommend that information concerning the product safety of our organosilanes is followed and carefully read prior to their use.

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