

Technical Data Sheet

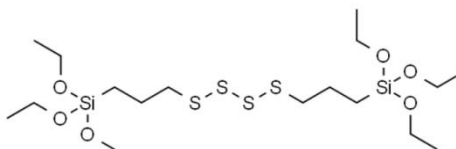
Silane Coupling Agent Si-69

Chemical Name: Bis-[3-(triethoxysilyl)propyl]-tetrasulfide; OBSi69

CAS No.: 40372-72-3

Molecular Formula: C₁₈H₄₂O₆S₄Si₂

Structural Formula:



Characteristics: Si-69 is a sulfur-containing organosilane containing bifunctional groups. It can be used in the combination of rubber and white base material containing silanol groups.

Specifications:

Properties	Specification	Test method
Appearance	Yellow transparent liquid	Visual
Sulfur content (%)	21.00-23.00	ASTMD6741
By-products GC*(%)	≤4.0	ASTMD6843
Specific gravity (25 °C, g/cm ³)	1.080±0.02	GB/T 4472
Refractive index (25 °C, g/cm ³)	1.480±0.02	GB/T 6488
S2 content HPLC (%)	17.0±3.0	ASTMD6844
S3 content HPLC (%)	30.0±4.0	
S4 content HPLC (%)	24.0±3.0	
S5-S8 Content HPLC (%)	27.0±3.0	
Average sulfur chain length (%)	3.75±0.15	
Chlorine content (%)	≤0.6	GB/T 3051

Application: It is suitable for vulcanized rubber systems with fillers such as white carbon black, glass fiber, talc, mica, clay and other fillers, which can improve the reinforcement ability of the filler and increase the wear resistance of rubber. As rubber additives-vulcanizing agent, active agent, suitable rubber types include NR, NBR, SBR, IR, BR, EPDM, etc. and their combined rubber materials. During the vulcanization process, the cross-linking speed of the tetrasulfanyl group is basically the same as the sulfur reversion rate in sulfur vulcanization, which plays a role in resisting vulcanization reversion, thereby improving the dynamic bending properties of rubber such as heat generation and crack elongation. 4 S atoms can also play a role in promoting vulcanization. It can also be used to make products under dynamic and static working conditions, such as tires, hoses, rubber rollers, tapes, cable insulation and covering materials, shoes and mechanical casting products, which can improve their wear resistance, cut resistance and pressure resistance; Reduce hysteresis and water absorption; improve its mechanical properties and bonding properties; enhance its thermal aging properties, modulus and flex life.

Recommended usage: 1.0-4.0 PHR.

Please Notice: The information provided here is for reference only. The specification will be provided in the quality certificate or in the contract. It is the user's responsibility to test the material and its suitability for a process. We have no control over what another party does with the material and we cannot take any responsibility for another party's action. Nor will we be responsible for any indirect damages while using our products. The user is welcome to contact our customer and technical service center with questions on our products.

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Package: 25kg/drum, 200kg/drum, 890kg IBC drum.

Storage: Stored in cool and dry place with closed container, keep away from fire source. After the container is opened, it should be sealed to prevent water vapor from entering to produce hydrolysis. Stored in the original unopened container at room temperature, this product has a shelf life of 1 year from the date of production.

Transport as non-hazardous goods, HS Code: 2930909099.

Safety and transport:

It is classified as a un-dangerous goods according transport legislation, It has no any hurt to use in right way.

Further information:

Product technical information and data is based on the best information available and does not constitute or imply a warranty or patent infringement of any kind. The user is responsible for testing product suitability prior to using into production.

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