

Product information

LT-172

Vinyltris (β-methoxyethoxy) silane

Product description

Structural formula:

Empirical formula: C₁₁H₂₄O₆Si Molecular weight: 280.4 CAS No.: 1067-53-4 Chemical name: Vinyltris (β-methoxyethoxy) silane

Technical data

Typical characteristics	Value
Appearance	Colorless to pale
	yellow
Purity	≥97.0%
Density at 25°C	1.04g/ml
Boiling point at	285°C
760mmHg	
Flash point, Tag closed	>110°C
cup	
Refractive index (25°C)	1.427

Note: the above data are for reference only, can not be used as a technical specification

Reactivity

In the presence of moisture the methoxyethoxy groups of LT-172 hydrolyze to produce β -methoxyethanol and reactive silanol (Si-OH) groups which can bond to a variety of inorganic substrates or react with each other to form siloxane bonds (Si-O-Si). The organophilic vinyl end of LT-172 can also react with a suitable polymer (activated by peroxide or radiation).

Properties

LT-172 is a vinyl-functional coupling agent that promotes adhesion among unsaturated, polyester-type resins or crosslinked polyethylene resins or elastomers and inorganic substrates, including fiber glass, silica, silicates and many metal oxides.

Application and performance

- is used as an efficient adhesion promoter for various mineral-filled polymers, improving mechanical and electrical properties especially after exposure to moisture.
- is used as a co-monomer for the preparation of different polymers such as polyethylene or acrylics. Those polymers show an improved adhesion to inorganic surfaces and they can also be crosslinked with moisture.
- is used to improve the compatibility of fillers with polymers, leading to a better dispersibility, reduced melt viscosity and easier processing of filled plastics.
- is used to pretreat of glass, metals, or ceramic surfaces, improve the adhesion of coatings on these surfaces and corrosion resistance.

Product safety, handling and storage

Customers considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage condition required. The "Best use before end" date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Packaging

Information on available container sizes is obtainable from **HUBEI BLUESKY** supplier.

The data presented in this leaflet are in accordance with the present state of our knowledge, but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this leaflet should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the products for a particular purpose.

Hubei Bluesky New Material Inc.

No. 8 Chemical Industrial Park Economic Development Zone, Xiantao, Hubei, CHINA 433003Telephone & Fax: +86-728-3254088; +86-728-3253808 E-mail: <u>cssilanes@blueskychemical.com</u> Website: <u>www.blueskychemical.com</u>.

