

3-Methylacryloxy propyl trimethoxy silane

OL-5

Features and Advantages:

OL-5 It is a reactive chemical with methacrylic acid based organic functional group and trimethoxyl silicon based inorganic functional group. This dual-functional structure gives OL-5 special properties: it can organically bond inorganic materials (e.g. glass, silica) with organic thermosetting resins, thus acting as an adhesion enhancer, cross-linker, or surface modifier. Ol-5 is a colorless transparent liquid sensitive to both light and heat, with a distinct sweet smell, soluble alcohols, aliphatic groups or aromatic hydrocarbons.

product description:

$$\begin{array}{c} \text{CH}_2 = \text{C} - \text{C} - \text{O} - \text{CH}_2\text{CH}_2\text{CH}_2 - \text{Si} - \text{OCH}_3 \\ \text{CH}_3 & \text{OCH}_3 \end{array}$$

Molecular formula: C10H20O5Si

Molecular weight: 248.4

CAS No. : 2530-85-0

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Chemical name: 3-methylacryloxypropyl trimethoxysilane

Product Specifications:

appearance	Colorless transparent
The purity	≥98.0%
The density of 25 ℃ g/ml	1.04-1.05
The boiling point of 760 MMHG	255℃
Closed cup flash point	108℃
The refractive index of 25 $^{\circ}\mathrm{C}$	1.424-1.434

Note: The above data is for reference only and cannot be used as technical specifications

Scope of application:

Treatment of glass fiber yarn with an infiltrating agent containing OL-5 silane coupling agent (containing film forming agent, lubricant and antistatic agent) can improve the mechanical strength of the glass fiber yarn reinforced composite.

Ol-5 can improve the dry and wet mechanical strength of polyester composites filled with silica, glass, silicate and metal oxides.

Ol-5 can improve the wet electrical properties of many inorganic filler filled composites.

Ol-5 can be copolymerized with vinyl acetate and acrylate or methacrylate monomers to synthesize silylated polymers that can be cross-linked and cured at room temperature. These

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silylated polymers are widely used in coatings, adhesives and sealants. Provides excellent adhesion and durability.

Ol-5 silane can be applied to inorganic surfaces as a diluted aqueous solution (0.1 to 0.5% silane). To prepare an aqueous solution, the pH of the water was adjusted to 3.0 to 4.5 with acetic acid, then silane was added and thoroughly stirred.

Nature of reaction:

In the presence of water (and suitable catalysts such as acetic acid), OL-5 hydrolyzes its alkoxy groups to form methanol and reactive silanol groups, which form bonds on the surfaces of various inorganic substrates. Methylallyl oxyls can react with suitable polymers. Suitable inorganic materials such as: glass, glass fiber, glass wool, mineral wool, silica, quartz, sand, calcite calcite and mica; As well as aluminum hydroxide, kaolin, talc and other silicate fillers, metals and metal oxides. Resins suitable for treatment include unsaturated polyesters, acrylics, and vinyl resins.

Packing: 5L 25L 200L 1000L

Storage: The container should be sealed after opening to prevent water vapor from entering and hydrolyzing. Stored IN THE original unopened container at ROOM temperature, the shelf life of this product is one year from the date of production. After the expired product passes the test, the buyer will decide whether to continue to use.

Remark: The company is only responsible for the sales specifications of the products at the time of delivery, and

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is not liable for any indirect or incidental damage.