

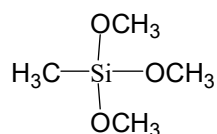


Methyltrimethoxysilane

RK-311

Product description:

Structural formula:



Molecular formula: C₄H₁₂O₃Si

Molecular weight: 136.2

CAS No. : 1185-55-3

Chemical name: methyl trimethoxy-silane

Features:

- ◇ Colorless transparent, low viscosity liquid. Soluble in alcohols, chain hydrocarbons and aromatic hydrocarbons and other organic solvents.
- ◇ It contains one methyl group and three hydrolyzable alkoxy groups.
- ◇ React with inorganic materials.
- ◇ It can be hydrolyzed to form an elastomer or a hydrophobic layer.

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nature	Numerical value
appearance	Colorless transparent liquid
purity	≥98.0%
Density 25°Cg/ml	0.9550±0.0050

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Boiling point 760mmHg	102.5℃
Closed cup flash point	11.1℃
Refractive index 25℃	1.4150-1.4250

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

Reaction property:

- ✧ RK-311 is an alkyl trialkoxy silane. The trialkoxy group is hydrolyzable, and after hydrolysis, the silicon hydroxyl group (Si-OH) is easily condensed to form a very stable silico-silicon structure (-Si-o-Si -). There are many factors affecting hydrolysis and condensation, the most important factors are: PH value, concentration, solvent, temperature and catalyst.
- ✧ RK-311 is hydrolyzed to form silanol, which can react with the hydroxyl group on the surface of inorganic materials such as quartz, clay, and silica to form a hydrophobic layer.
- ✧ The alkoxy silane in RK-311 can react with hydroxy-terminated alkoxy silane under the action of catalyst. Then, using the hydrolyzable condensation of alkoxy silane, elastomers with good mechanical properties can be formed

Product application:

- Dealcoholized single component room temperature vulcanized silicone rubber crosslinking agent, silicone resin coating.
- RK-311 transparent coatings obtained by hydrolyzing condensation are widely used as surface hardening,



wear-resistant and solvent resistant coatings for plastic products such as sunlight panels, eye lenses, sunglasses and automotive taillights.

- Sol-gel for the production of organic and inorganic hybrid materials. RK-311 can be used alone, or with other silicates, or other organosilanes co-hydrolysis, through the sol-gel process, can be adjusted by hydrolysis PH value, temperature and concentration and other conditions to achieve a variety of required properties.
- Surface hydrophobic agent for inorganic materials
- When used as filler pigment treatment agent, the recommended addition amount of RK-311 is 0.5 to 1.0% of the total solid content. When used as powder filler treatment agent, RK-311 can be directly added to the powder mixer to treat the filler. RK-311 can also be used with methanol or isopropyl alcohol diluted to 10%, in general, silane relative to the total solid content of 0.5 to 1.0%.
- The pigment dispersant can be added directly to the resin with the pigment to improve the dispersion of the pigment in the resin.

Product security, handling and storage:

The container should be sealed after opening to prevent water vapor from entering and producing hydrolysis. Stored in the original unopened container at room temperature, this product has a shelf life of one year from the date of production. After passing the test, the buyer will decide whether to continue to use the expired product.

Note: The Company is only responsible for the sales specifications of the

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products at the time of shipment, and shall not be liable for any indirect or incidental damages.

Packing 5L, 10L, 25L, 200L, 1000L