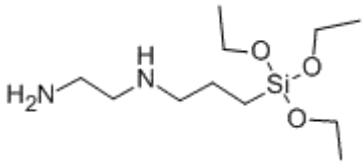
N-(2-aminoethyl) -3-aminopropyl triethoxysilane

RK-G791

Product description

Structural formula:



Molecular formula: C11H28N2O3Si

Molecular weight: 264.44

CAS No.5089-72-5

Chemical name: N-(2-aminoethyl) -3-aminopropyl triethoxysilane

peculiarity

RK-G791 is a difunctional silane with an active amino group and a hydrolyzable non-methoxysilane. Due to the dual nature of its reaction, it is able to organically bond inorganic materials (such as glass, metal, fillers) and organic polymers (such as thermoplastics, thermosetting plastics or elastomers) together. It is used as a tackifier, a surface modifier for organic/inorganic interfaces (anti-corrosion, primer) or as a silicone polymer or crosslinking agent (moisture crosslinked polymer).

RK-G791 as a coupling agent used in mechanical and electrical products can greatly improve the product's water resistance, corrosion resistance and electrical properties (such as volume resistivity, dielectric constant).

Tianjin Ruike Chemical Co. LTD Tel:+86 18526852692
Add:Room 116-11, 160 Xiangyuan Road, Jingjin Science and Technology Valley Industrial Park, Wuqing District, Tianjin
tjrkhg@126.com **www.rk-chem.com**

RK-G791 is a colorless, transparent liquid with a special ammonia taste, soluble in alcohols, chain hydrocarbons and aromatic hydrocarbons.

Physical and chemical data

nature	Numerical value
appearance	Colorless transparent liquid
purity	≥97.0%
Density 20℃g/ml	0.9600-0.9700
Boiling point 760mmHg	308.7±22.0℃
Closed cup flash point	123℃
Refractive index 25℃	1.4310-1.4470

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

Reaction property

In the presence of water, RK-G791 will hydrolyze the silicon hydroxyl groups that produce domestic waves and form bonds on the surface of various inorganic materials. The organic diaminogroup of RK-G791 can react with suitable organic polymers.

RK-G791 can self-catalyze hydrolysis reaction. Suitable inorganic substrates include fiberglass, fiberglass fabrics, fillers (such as glass, mineral wool, mica, talc, wollastonite, kaolin, metal oxides, etc.).

RK-G791 can react with a variety of organic polymers, such as phenolic resin, furan resin, polystyrene, acrylic resin, polyvinyl chloride, nylon, melamine, silicone rubber, etc.

RK-G791 can react in ketone or ester solvents. The silane itself or the silanized substrate reacts with carbon dioxide to form the corresponding

carbonate or carbamate.

Product application

RK-G791 is an important additive in many areas, such as:

- Glass fiber/electronic cloth composite material: can be used as glass fiber treatment agent, can also be used as infiltrating agent additive
- As a primer for glass and metal
- Casting resin: as an additive to various casting resins
- Sealants and adhesives: as primer or adhesion enhancers
- Inorganic filled polymers: preconditioning agents or additives for fillers and pigments
- Paints and coatings: as an additive or primer to improve adhesion to the substrate

Other important benefits of RK-G791 include: Improved product performance, such as:

- The flexural strength, tensile strength, impact strength and elastomer modulus of the composite in both wet and dry conditions.
- Improved resistance to moisture and corrosion

Improve processing performance, such as:

- Caking property
- Dispersivity

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

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