

Silane Terminated Polyether Polymer RISUN DF-3

RISUN DF-3 is alkoxy silane terminated polyether polymer. It could be applied in moisture curing elastic sealant, elastic structure sealant and sealing coatings. Sealants based on RISUN DF-3 not only have excellent adhesion properties, but also have adhesion to broad range of substrates. Different from polyurethane and silicone system, this formulation have no solvent and isocyanate, as well as no bubbles and odour generated from curing. It is especially suitable for construction industry, transportation industry and general industry application.

Properties and Features

- Low Activity, low shrink.
- Lower viscosity, could adding more powder
- Good adhesion strength and tensile elasticity
- Excellent aging and yellowing resistance
- Excellent water resistance , resistance to chemical corrosion
- Solvent free , odourless , eco-friendly
- Could be blended with other Risun polymers

Physical Data

Item	Parameter
Polymer Type	Silane terminated polyether
Appearance	Slight yellow liquid
Boiling Point	>250°C
Gravity	About 1.0 g/cm ³
Viscosity	500-1500 mPa·s (25°C)
Flash Point	≥237°C
Water-Soluble	Virtually Insoluble
Shelf Life	12 months (25°C/50% RH)

Applications

RISUN DF-3 polymer is used as base polymer in elastic sealants, elastic structure sealants, encapsulate adhesives and coatings . The curing mode of the polymer is moisture curing, It can be made into a single component or two-components system.

- High hardness sewing sealant
- Transportation industry elastic sealant

- Low viscous encapsulate adhesive
- Personal DIY sealant
- Eco-friendly decoration sealant

Instructions

RISUN DF-3 polymer can be quickly dissolved in ordinary organic solvents (such as ethanol), but almost insoluble in water. So the raw materials in the formula system are mostly oil-soluble substances. RISUN DF-3 polymer curing mechanism, silane of both ends with the help of the catalyst react with water forming hydrolysis to generate Silanol, Silanol is crosslinked with catalyst to form a siloxane bond, resulting in a network-like structure. Although the 201S polymer has a highly reactive group, it can remain stable in the air for a period of time in a catalyst-free environment. Water is a very important factor during the storage and processing. In order to stabilize the processing and storage, it must add a certain amount of chemical water removal agent, we recommend the use of vinyl trimethoxysilane. Conventional mixing process can be suitable for RISUN DF-3 POLYMER. For more technical support, please consult our technical engineers.

Cleaning

This product can be removed before curing by the general solvent, such as ethanol, dimethyl carbonate. After curing can only be removed by mechanical means.

Safety

Please refer to the Material Safety Data Sheet (MSDS)

Storage

Because this product is moisture sensitive, If unopened and stored at 4°C-30°C dry environment, the shelf life is 12 months. Use it as soon as possible if opened, the remain products should be resealed and stored at 4°C-30°C dry environment. But if shelf life expired, you can still use it only after your positive confirmation of production performance.

Package

- 50kg plastic drum lined with aluminum foil bag
- 200kg drum lined with aluminum foil bag
- 1000kg IBC

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