

Silane Terminated Polyether Polymer TUPS 400

TUPS 400 is alkoxy silane terminated polyether polymer. It could be applied in moisture curing elastic sealant, elastic structure sealant and sealing coatings. Sealants based on TUPS 400 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

- Moderate Activity , Moderate Modulus
- High transparency
- Excellent bond strength and tensile elasticity
- Fast curing , non-tin catalysts used if needed, more eco-friendly
- Excellent aging and yellowing resistance
- Excellent water resistance , resistance to chemical corrosion
- Excellent elastic recovery rate
- Excellent storage stability
- Solvent free , odourless , eco-friendly
- Could be blended with other Risun polymers

Physical Data

Item	Parameter
Polymer Type	Silane terminated polyether
Appearance	yellow liquid
Boiling Point	>250°C
Gravity	About 1.0 g/cm ³
Viscosity	15000-30000 mPa·s (25°C)
Flash Point	≥237°C
Water-Soluble	Virtually Insoluble
Shelf Life	12 months (25°C/50% RH)

Applications

TUPS 400 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.

- Industrial adhesives
- Building sealant
- Transportation industry elastic sealant
- Personal DIY sealant
- Eco-friendly decoration sealant

Instructions

TUPS 400 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. TUPS 400 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 3019 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 TUPS 400 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

The data presented in this article are based on our current knowledge level and experience. Specific guarantee indicators to quality assurance requirements shall prevail. We reserve the right to change product constants within the scope of technological advances or new developments. Due to uncontrollable conditions during processing, especially when using raw materials from other companies, we have limited liability to the products we provide and are part of the part that is delivered by us. The information we provide does not waive the obligation of the user to check for the possibility of a third party infringement and, if necessary, clarify the circumstances. It is express or implied that, the recommendations in this document do not constitute a guarantee of the validity or versatility of the Product under a particular application.