

Technical Data Sheet

ESON301

Anti-Aging Silane Terminated Polyether

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ESON301 is a silane terminated polyether, which can be used to make moisture-curing elastic sealants, elastic structural adhesives, and sealing coatings. The resin not only has excellent adhesive performance, but also has a wide range of bonding substrates, no free isocyanate, and no volatile gas is generated during the curing process. It is suitable for conventional sealing and bonding in construction, industry and other industries.

Product Features

- Low activity, medium modulus;
- Excellent bonding strength and tensile properties;
- No solvent, no odor, friendly to the environment;
- It can be blended with other SIPE polymers;
- Excellent aging resistance and yellowing resistance.

Main Application

ESON301 polymer can be used as a base polymer in elastic sealants, elastic structural adhesives, potting compounds and coating materials. The curing method of the polymer is moisture curing and can be made into one-component, two-component or multi-component systems. The main application areas are:

- High modulus building sealant
- Transportation industry sealant
- Transparent sealant
- Adhesive for home improvement

Technical Data^①

Item	Technical Parameters
Polymer Type	Silane modified polyether
Appearance	Colorless transparent viscous liquid
Boiling Point, °C	≥250
Specific Gravity, g/cm ³	1.0
Viscosity, (25°C), mPa • s	15000-25000
Water Solubility	almost insoluble in water
Shelf Life, Months	≥12

①Data at the conditions 23±2°C、50±5%RH

Direction For Use

- ESON301 polymer can be quickly dissolved in common organic solvents, but almost insoluble in water. Therefore, most of the raw

and auxiliary materials

in the formulation system are oil-soluble substances.

- The curing mechanism of the polymer is that the alkoxy silane at both ends of the resin reacts with water under the condition of the catalyst, and is hydrolyzed into silanol, and the silanol is cross-linked under the condition of the catalyst to form siloxane bonds, and finally form a network structure.
- Polymer is added in the formulation using conventional mixing process, high temperature dehydration or a certain amount of chemical dewatering agent can be used in the process of processing, we recommend using vinyl trimethoxy silane.
- For more technical support, please consult our technical engineers.

Cleaning

- The uncured resin can be cleaned with common solvents, such as ethanol. After curing, it can only be removed mechanically and the surface is cleaned.

Safety Precautions

- Store away from children.
- Avoid contact with eyes and skin. In case of accidental contact with skin, wipe with cloth first, and then wash with soap; in case of accidental contact with eyes, seek medical attention as soon as possible after flushing with plenty of water. Please refer to the Material Safety Data Sheet (MSDS) for details.

Packing Specifications

- 200kg/drum, packed in iron drum lined with aluminum film bag;;
- 1000kg/drum, packed in plastic ton drums;

Transportation And Storage

- Transportation: Moisture-proof, rain-proof, sun-proof, high-temperature protection, away from heat sources, handle with care, no extrusion collision
- Storage: sealed and stored in a low-temperature, dry place, the recommended storage temperature is 5~25° C, humidity ≤ 50%RH.
- Storage period: 12 months.

Special Notes: All recommendations concerning our products, including transportation, storage, and handling are based on our current knowledge and experience under normal conditions. In practical application, results may differ because of materials and actual site conditions change, our company do any guarantee and bear any legal responsibility. In order to ensure the bonding effect and the compatibility of products and materials, it is recommended to do the compatibility test or consult our company's Technical Services before proceeding with the full application.

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