

Technical Data Sheet

ESON103

High Hardness Polyurethane Prepolymer

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ESON103 is a kind of polyether polyol reacting with MDI in a certain ratio to produce a reactive product with urethane as the structural feature and NCO group capping, which can be used for door and window group corner adhesive with high strength and active performance.

Product Features

- Product color is light yellow transparent, medium to high modulus;
- No solvent, no odor, and friendly to the environment;;
- Medium viscosity, good mixing and dispersing performance;
- Excellent water resistance;
- Excellent adhesive properties.

Main Applications

ESON103 is used as a base polymer for structural sealant, bonding adhesive and other materials, the polymer is moisture cured and can be made into a one-component or two-component system, mainly used in:

- Group corner adhesive for door and window industry
- Construction sealant

Technical Data^①

Item	Technical Parameters
Polymer Type	MDI prepolymer
Appearance	Pale yellow transparent viscous liquid;
Viscosity (25℃), mPa·s	9000-11000
NCO Content, %	9.0-10.0

① Data at the conditions 23±2℃、50±5%RH.

Direction For Use

- ESON103 polymer can be quickly dissolved in common organic solvents (such as benzene, xylene), but is insoluble in water, curing mainly through the reaction between NCO and water vapor in the air, cross-linking to form a network structure, the formation rate increases exponentially under the action of the catalyst.
- It is necessary to add certain chemical dehydrating agent during the operation with this product as well as

in a low moisture environment in order to avoid undesirable early cross-linking during the production process.

Cleaning

- Before curing, generally use solvent such as ethanol for cleaning, if it has been cured, you need to use mechanical means to remove.

Cautions

- Keep away from children.
- Avoid contact with eyes and skin. In case of contact with skin, wipe with cloth first, then wash with soap; in case of 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 Specification

- 200kg/drum, packed in iron drums lined with aluminum film bags;

Transportation And Storage

- Transportation: Protect from moisture, rain, sunlight, heat, heat source, careful and light storage, no squeezing and collision.
- Storage: The product should be stored in a sealed laminated film bag. When storing this product, it should be avoided in a humid environment, and the storage temperature should be kept below 25℃, avoid sunlight as much as possible, and keep away from water and heat sources. Storage temperature higher than 60℃ will lead to product quality degradation. Short-time warming or cooling has little effect on the quality of the product. However, it should be noted that the product is stored in vacuum seal in time after use to avoid solidification in the next use.
- Storage period: 15~25℃, 9months.

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.

GUANGDONG SHENGYE CHEMICAL TECHNOLOGY CO.,LTD

Add: Huiyang District, Huizhou City, Guangdong Province, China