

# Epoxy Modified Polysiloxane LD-3169

## **First, Ingredients**

Epoxy modified polysiloxane

## **Second, Characteristics**

Good epoxy reactivity, good storage stability, could improve mechanical properties of composites, could improve the compatibility between inorganic fillers and resins.

## **Third, Typical physical data**

Appearance: colorless to yellowish transparent liquid

Density (25°C) : 1.08-1.09 g/cm<sup>3</sup>

## **Fourth, Solubility**

This product is soluble in water, isopropanol, acetone, toluene, xylene, mineral oil and other organic solvents. Generally speaking, siloxane could be dissolved in most of common organic solvents, the solubility and the stability of the product in the specific solvent should be verified.

## **Fifth, Application**

This product belongs to epoxy modified polysiloxanes. Compared with conventional epoxy siloxanes LD-3169 could maintain good epoxy reactivity and coupling effect and provide better storage stability. It is widely used in modified plastics, coatings and other fields. This product is suitable for many industries, including water-borne sealants, water-borne coatings, water-borne adhesives and water-borne primers. When used as an additive, it could greatly improve the performance of products, such as bending strength, tensile strength, impact strength and elastic coefficient. When used as an additive the viscosity of the system is obviously improved, the filler is well dispersed and the adhesion is improved. This product is suitable for wet and dry treatment of inorganic pigments and fillers, such as inorganic minerals and fibers, in order to make the filler surface chemically modified by siloxane. This product is suitable for the treatment of metal surfaces. As a metal surface treatment agent, it could provide good surface modification effect.

## **Sixth, Usage**

When the product is used as an additive the recommended dosage of the siloxane is generally 0.5-3.0% upon total formulation. The best dosage and usage of each application need to be obtained through series of tests. This product will produce a small amount of low molecular alcohol during the reaction, proper ventilation system should be considered in the production process.

## **Seventh, Packaging and storage**

This product is packed in 25L/200L plastic drums. After opening, the product should be sealed and stored in a cool place to prevent contamination due to water entry. The shelf life of the product is 6 months from the date of production when it is stored in the original unopened container at atmospheric pressure and at temperatures below 20 °C.