

### **Epoxy-terminated Modified Silicone Oil**

SK-SOEP-1-50E

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$$R \longrightarrow Si \longrightarrow O \longrightarrow Si \longrightarrow R$$

$$R \longrightarrow C(CH_2)_3OCH_2CHCH_2$$

$$R \longrightarrow O \longrightarrow O$$

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$$R \longrightarrow O$$

#### **Product Description:**

This product is a glycidyl ether epoxy-modified silicone polymer, end-capped with glycidyl ether epoxy groups. Its backbone consists of dimethylsiloxane segments. The terminal epoxy groups make it suitable as a reactive modifier for organic resins, widely used as an intermediate for block polymers.

# **Technical Specifications:**

Parameter	Typical Value	Test Method/Instrument
Appearance	Colorless to pale yellow transparent liquid	Visual inspection
Viscosity (mPa.s/25℃)	50~1500	GB/T 10247-2008
Epoxy value (mol/100g)	0.0048~0.011	GB/T 4612-2008
Volatile content (%)	≤ 1.0	150℃/1H

### **Typical Applications:**

- Modification Intermediate: Used as a block polymer raw material for ternary copolymer silicone oils in textile printing and dyeing.
- Toughening Agent: Added to epoxy resin systems to enhance flexibility and improve heat resistance.
- **●** Resin Modification: Suitable for modifying organic polymers.

# Packaging & Storage:

- Packaged in 200KG iron drums.
- Store at room temperature, dry, and away from light.
- Non-flammable and non-explosive, classified as non-hazardous for transport.
- Best used within 12 months from the production date. Re-inspect if expired.

# **Safety & Environmental:**

- Ensure proper protective equipment is worn when handling this product. Refer to the Material Safety Data Sheet (MSDS) for details.
- Dispose of packaging according to local solid waste regulations.

#### **Notes:**

- The information provided in this document is based on reliable data from our company. Product specifications and performance may change without prior notice.
- The information is derived from laboratory and practical experience and is for reference only. Since conditions and methods of use are beyond our control, application testing is recommended before use.
- Some performance parameters of the product can be adjusted according to customer requirements. If needed, please contact our technical department engineers.