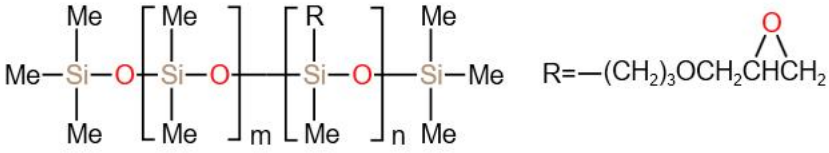
sking
天启新材料

Product Datasheet

Side-chain Epoxy-modified Silicone Oil

SK-SOEP-2-100S



Product Description:

●This product is a cycloaliphatic epoxy-modified silicone polymer, end-capped with methyl groups. Its backbone consists of alternating or block structures of dimethylsiloxane and cycloaliphatic epoxy groups. The introduced side-chain epoxy groups make it suitable for designing cationic UV-curable silicone products, widely used as intermediates for block polymers.

Technical Specifications:

Parameter	Typical Value	Test Method/Instrument
Appearance	Colorless to pale yellow transparent liquid	Visual inspection
Viscosity (mPa.s/25℃)	100~10000	GB/T 10247-2008
Epoxy value (mol/100g)	0.50~0.01	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.

●Diluent: Added to cationic UV-curable 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.