

Alkoxy Silicone Resin

SK-AR-3074

Product Overview:

● This product is a methoxy-functionalized, solvent-free liquid silicone resin designed for high-performance coatings. Its chemical structure combines phenyl and methyl siloxane groups, offering excellent heat resistance, weather resistance, and compatibility with organic resins. It can be blended or pre-reacted with organic resins (e.g., polyester, epoxy) to form silicone-organic copolymers or self-condensed to create a homopolymer curing network. Its low viscosity supports low-VOC formulations, making it suitable for food-contact coatings and high-temperature industrial coatings in demanding environments.

Technical Specifications:

Test Item	Typical Data	Test Standard/Instrument
Appearance	Colorless to light yellow transparent liquid	Visual inspection
Viscosity (mPa.s/25℃)	50~200	GB/T 10247-2008
Methoxy Content (%)	15~18	ASTM D5622
Phenyl/Methyl (ratio)	0.9~1.1	/
Molecular Weight (×1000)	1~1.5	ISO 13885-1

Typical Applications:

- **Industrial Coatings:** Used for corrosion protection and high-temperature resistance on pipelines, storage tanks, etc.
- **Cookware Coatings:** Withstands repeated high-temperature baking and complies with food-contact safety standards.
- **Silicone-Polyester Copolymers:** Enhances the heat resistance of polyester resins through pre-reaction or cold blending.

Packaging and Storage:

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

Safety and Environmental Protection:

- Ensure proper protective equipment is worn before using this product. For specific details, please refer to the Material Safety Data Sheet (MSDS).
- Dispose of used packaging in accordance with 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 provided is based on our laboratory and practical experience, and is for reference only. Since the conditions and methods of using this product are beyond our control, application testing and evaluation are recommended before use.
- Some performance parameters of the product can be adjusted according to customer requirements. If needed, please contact our technical department engineers.
