Technical Data Sheet

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Silfluo LR-H160

High Temperature Silicone Resin

Properties & Uses

Silfluo LR-H160 is a methyl phenyl silicone resin produced by polymerization of methyl and phenyl monomers with functional silane monomers, supplied at 60% solid content in toluene-containing solvent. The resin cures at ambient temperature and achieves full cure in 2 hours at 180° C. When formulated with leafing aluminum powder at a 4:1 resin-to-pigment ratio, the cured coating withstands 500 ± 10° C for 3 hours without peeling, cracking, or blistering.

Typical Technical Properties:

Silfluo Code:	LR-H160
Appearance	Colorless to light yellow transparent liquid, opalescence is permitted
Solid content, %	60 ±1
Viscosity (25°C,cp)	≥ 500
Curing Profile:	Surface dry in ≤ 2 hours at ambient temperature; fully cured in 2 hours at 180°C
Heat Resistance (Varnish mixed with leafing aluminum powder at a 4:1 ratio, exposed to 500±10°C for 3 hours):	No peeling, no cracking, no blistering

Application

1. Heat-Resistant Coatings

Formulated with pigments and functional materials for heat-resistant coatings on exhaust pipes, electrostatic precipitators, and stoves.

2. Resin Modification

Blended with organic resins alkyd, acrylic, polyester, and epoxy to improve temperature resistance of the formulated coating.

Use Reference

1. Diluent Purity: Any diluents introduced must be free of water, acids, alkalis, amines, and other reactive compounds. Contamination will degrade adhesion, drying profile, and film properties.

2. Safe Handling and Ventilation: This product contains toluene and other flammable, volatile solvents. Explosion-proof ventilation must be maintained during processing and application. Keep away from open flames, ignition sources, and static electricity sources. Follow occupational safety protocols and use appropriate personal protective equipment (PPE).

3. Dilution Guidelines: Compatible and dilutable with ketones, esters, toluene, and xylene.

Package &Storage:

In 200kg drum.

Keep in a cool, dry, and well-ventilated environment, strictly avoiding direct sunlight, acids, and alkalis. The shelf life is 6 months from the date of manufacture when stored in original unopened containers (material can still be utilized if it passes quality inspection after the expiration date). Classified and transported as a hazardous substance (flammable liquid).