



Silfluo LR-M125

Alkyd Modified Silicone Resin

Descriptions:

Silfluo LR-M125 is an alkyd-modified silicone resin produced by copolymerization of silanol (derived from hydrolysis of methyl and phenyl silane monomers) with alkyd resin, supplied at 50% solid content. The combined silicone-alkyd matrix provides heat resistance, weather resistance, and substrate adhesion, with ambient-temperature curing capability, hardness, pigment dispersion, and flexibility in the cured film.

When formulated with leafing aluminum powder at a 4:1 resin-to-pigment ratio, the cured coating withstands $400 \pm 10^\circ \text{C}$ for 4 hours without peeling, cracking, or blistering.

Typical Technical Properties:

Silfluo Code:	LR-M125
Appearance	Pale yellow liquid, milky white light allowed, free of mechanical impurities.
Solid content %	50±1
Viscosity (Flow Cup No. 4, 25°C, S)	25-65
Curing Profile:	Surface dry in ≤ 2 hours at ambient temperature; hard dry in 24 hours at ambient temperature; fully cured in 1 hour at 180°C
Heat Resistance (Varnish mixed with leafing aluminum powder at a 4:1 ratio, exposed to $400 \pm 10^\circ \text{C}$ for 4 hours):	No peeling, no cracking, no bubbling.

Application:

1. Heat-Resistant and Weather-Resistant Coatings

Used for formulating heat-resistant coatings for continuous service up to 300°C and weather-resistant paints.

2. Electrical Insulation

Used in the formulation of Class H silicone-based insulating varnishes.

Use Reference

1. Ambient Cure (Two-Component): Cure at room temperature by formulating as a 2K system with isocyanate hardener (e.g., Bayer 3390, N75) at 10 – 20% hardener addition based on total resin weight.

2. Forced Thermal Cure: Fully cure by baking at 180°C for 1 hour. Compatible with amino resins to accelerate thermal cure.

3. Safe Handling and Ventilation: This product contains xylene and other flammable, volatile solvents. Explosion-proof ventilation must be maintained during handling and application. Keep away from open

Technical Data Sheet



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flames, ignition sources, and static electricity sources. Follow occupational safety protocols and use appropriate personal protective equipment (PPE).

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).