# Technical Data Sheet

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# Silfluo LR-EP167

Silicone Resin Emulsion

## Description

Silfluo LR-EP167 is a non-ionic, epoxy-modified methyl/phenyl silicone resin emulsion supplied as a milk-white water-based liquid at 50% solid content. The epoxy modification introduces reactive epoxy groups (epoxy value 0.06–0.16 on effective solid content basis) that enable crosslinking with water-based polyamide or amine curing agents at ambient temperature. Heat resistance reaches up to 300°C for clear varnish formulations and up to 500°C for aluminum-pigmented or thermally pigmented coatings.

## Typical Technical Properties:

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|---|---|
| Silfluo Code: | LR-EP167 |
| Appearance | Milk white liquid |
| Viscosity (Flow Cup No. 4, 25°C, S) | 25-40 |
| Solid content (150°C,2h), % | 50± 2 |
| Epoxy value (Effective solid content) | 0.06-0.16 |

## Application

Industrial Anti-Corrosion and Thermal Coatings

Used in industrial high-temperature paints requiring salt spray resistance, including marine steam pipelines and related harsh-environment applications.

## Use Reference

1. Formulation Procedure: Prepare a water-based, resin-free color paste before blending with the resin emulsion to ensure homogeneous pigment dispersion.
2. Compatibility Testing: When blending with organic resins or water-based polyamide curing agents, thorough compatibility testing is required before production use, particularly for clear varnish formulations.
3. Handling Strength: Ambient curing provides early handling strength sufficient for workpiece transportation after coating application.
4. Curing Profile for Maximum Performance: Forced thermal curing at 200–280°C for 15–60 minutes is recommended to achieve maximum heat resistance and physical-mechanical properties. Recommended profiles:

- 250°C for 30 minutes
- 280°C for 15 minutes

## Package &Storage:

In 50kg plastic pail and 200kg plastic drum.

Keep sealed in a cool, dry environment at temperatures strictly between 5°C and 36°C. 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).



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