

Technical Data Sheet (TDS)

Product Identification

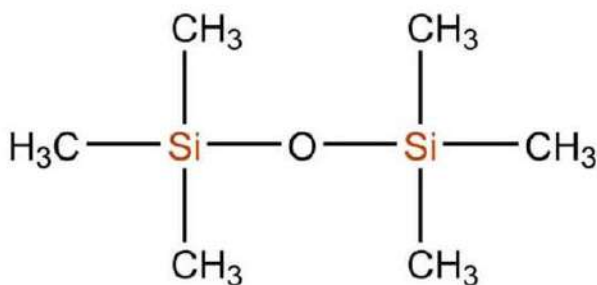
Product Name: Silico® MF2010-100 cSt Silicone Fluid

Chemical Name: Polydimethylsiloxane (PDMS)

CAS Number: 63148-62-9

Product Type: Linear dimethyl silicone fluid

Chemical Structure



Product Description

Silico® MF2010-100 cSt Silicone Fluid is a high-purity, linear polydimethylsiloxane (PDMS) silicone oil with a nominal kinematic viscosity of 100 cSt at 25°C. It is engineered to deliver stable viscosity, excellent thermal and oxidative resistance, low surface tension, and chemical inertness.

This medium-viscosity silicone fluid provides consistent performance across a wide temperature range and is suitable for industrial lubrication, heat transfer systems, mold release agents, electrical insulation, damping fluids, and specialty surface treatment formulations.

Typical Physical & Technical Properties

| Property | Typical Value |
|--------------------|-------------------------|
| Appearance | Clear, colorless liquid |
| Chemical Structure | Linear PDMS |

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|----------------------------|--------------------------|
| Kinematic Viscosity (25°C) | 100 cSt |
| Density (25°C) | ~0.965 g/cm ³ |
| Refractive Index (25°C) | ~1.402 |
| Flash Point (Closed Cup) | ≥ 280°C |
| Auto-Ignition Temperature | ≥ 400°C |
| Pour Point | ≤ -55°C |
| Surface Tension (25°C) | ~20.7 mN/m |
| Volatility (150°C, 24 h) | Low |
| Solubility in Water | Insoluble |
| Dielectric Properties | Good |

Key Performance Features

- Stable medium viscosity with low temperature dependency
- Excellent thermal and oxidative stability
- Low surface energy for effective wetting and release
- Hydrophobic and water-repellent
- Chemically inert and non-corrosive
- Low volatility and high flash point
- Suitable for electrical and electronic applications

Typical Applications

- Industrial and light mechanical lubrication
- Heat transfer and thermal bath systems
- Mold release agents for rubber and plastics
- Damping fluids for instruments and control devices
- Electrical insulation and dielectric fluids
- Surface treatment, polishing, and coating formulations
- Anti-foaming and processing aid applications

Packaging & Storage

- Packaging Options: 20 kg pails, 190 kg drums, IBC containers
- Storage Conditions: Store in tightly closed original containers in a cool, dry, and well-ventilated area
- Shelf Life: Up to 24 months under recommended storage conditions