

Silico® MF2010-60,000 cSt Silicone Fluid

Technical Data Sheet (TDS)

Product Identification

Product Name: Silico® MF2010-60,000 cSt Silicone Fluid

Chemical Name: Polydimethylsiloxane (PDMS)

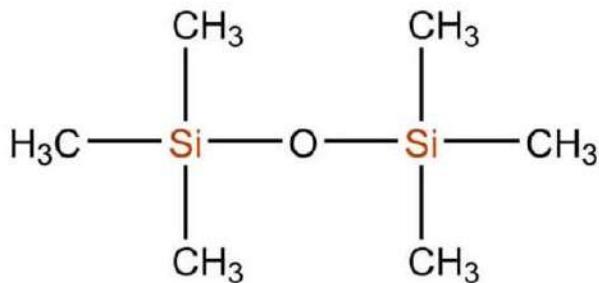
CAS No.: 63148-62-9

Molecular Structure: Linear dimethyl polysiloxane

Product Type: Ultra-high viscosity silicone fluid

Brand: Silico®

Chemical Structure



Product Description

Silico® MF2010-60,000 cSt Silicone Fluid is an ultra-high viscosity, linear PDMS silicone fluid designed for precision industrial systems requiring extreme film thickness, strong damping response, and long-term stability.

With a nominal viscosity of 60,000 cSt at 25 °C, this product delivers exceptional resistance to flow, shear, and migration, making it suitable for heavy-load lubrication, vibration damping, motion control, and dielectric insulation in demanding industrial environments.

Typical Physical & Technical Properties

Property	Typical Value
Appearance	Clear, colorless, highly viscous liquid
Chemical Type	Polydimethylsiloxane (PDMS)

CAS Number	63148-62-9
Kinematic Viscosity (25 °C)	60,000 cSt
Density (25 °C)	~0.97 g/cm³
Refractive Index (25 °C)	~1.403
Surface Tension (25 °C)	~21.5 mN/m
Flash Point (Closed Cup)	≥ 315 °C
Pour Point	~ -50 °C
Solubility	Insoluble in water
Thermal Stability	Excellent
Dielectric Properties	High resistivity, stable insulation

Typical values are provided for reference only and are not intended as product specifications.

Key Performance Characteristics

- Ultra-high viscosity for thick, durable film formation
- Excellent thermal and oxidative stability
- Low volatility and high flash point
- Chemically inert and material-compatible
- Strong hydrophobicity and low surface tension
- Stable dielectric properties for electrical applications

Typical Applications

- Precision damping and vibration control fluids
- Heavy-viscosity lubrication for slow-moving or high-load components
- Motion control and shock absorption systems
- High-viscosity mold release agents
- Dielectric and insulating fluids for electrical equipment
- Base fluid for specialty formulations, coatings, and surface treatments

Packaging, Storage & Handling

- Packaging: 180 kg drums, 950 kg IBC totes
- Storage Conditions: Cool, dry, well-ventilated area; keep containers sealed
- Shelf Life: Up to 24 months under recommended conditions
- Handling: Follow standard industrial hygiene practices; clean spills promptly to avoid slip hazards