

Silico® MF2010-3000 cSt Silicone Fluid

Technical Data Sheet (TDS)

Product Identification

Product Name: Silico® MF2010-3000 cSt Silicone Fluid

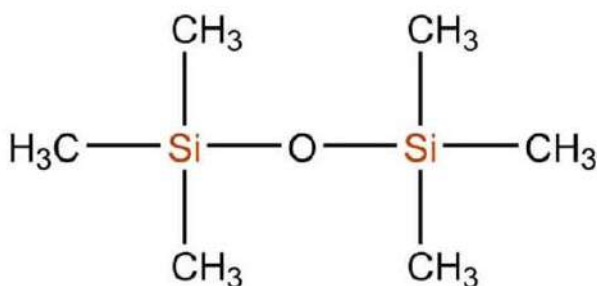
Chemical Name: Polydimethylsiloxane (PDMS)

CAS Number: 63148-62-9

Molecular Structure: Linear dimethyl polysiloxane

Brand: Silico®

Chemical Structure



Product Description

Silico® MF2010-3000 cSt Silicone Fluid is a high-purity, linear PDMS engineered for applications demanding extremely high viscosity, robust film formation, and long-term stability.

The 3000 cSt grade provides maximum mechanical damping, lubrication retention, and surface coating stability, making it suitable for industrial damping systems, high-load lubrication, mold release, and specialty industrial formulations.

Typical Physical & Technical Properties

Property	Typical Value
Appearance	Clear, colorless liquid
Chemical Type	Polydimethylsiloxane (PDMS)
Kinematic Viscosity (25 °C)	3000 cSt
Density (25 °C)	~0.97 g/cm ³

Refractive Index (25 °C)	~1.403
Surface Tension (25 °C)	~21 mN/m
Flash Point (Closed Cup)	≥ 320 °C
Pour Point	approx. -30 °C
Volatility (150 °C, 24 h)	Very low
Solubility	Insoluble in water; soluble in many organic solvents
Thermal Stability	Excellent
Dielectric Strength	High
Electrical Resistivity	High

Key Performance Characteristics

Ultra-high viscosity for thick film formation and long-lasting damping
Excellent thermal and oxidative stability for extended operational life
Strong hydrophobicity and low surface tension for surface protection
Chemically inert, compatible with metals, plastics, elastomers
Low volatility, high flash point for safe high-temperature use
Stable dielectric properties for electrical insulation applications

Typical Applications

Heavy-duty mechanical damping and vibration control
High-load industrial lubrication
Mold release agents for plastics, rubber, and composites
Viscous coupling fluids and motion-control systems
Surface treatment, coating, and polishing additives
Electrical insulation and dielectric fluids

Packaging & Storage

Packaging: 20 kg pails, 190 kg drums, IBC containers
Storage Conditions: Sealed containers, cool and dry environment
Shelf Life: Up to 24 months under recommended storage conditions
Handling: Follow standard industrial hygiene practices