

# Technical Data Sheet (TDS)

## Product Identification

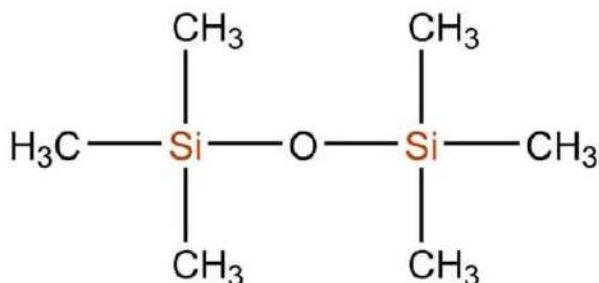
Product Name: Silico® MF2010-1000 cSt Silicone Fluid

Chemical Name: Polydimethylsiloxane (PDMS)

CAS Number: 63148-62-9

Product Type: Linear high-viscosity silicone oil (non-food grade)

## Chemical Structure



## Product Description

Silico® MF2010-1000 cSt Silicone Fluid is a high-purity, non-food grade PDMS designed for industrial and electronic applications requiring high viscosity, excellent thermal stability, chemical inertness, and low volatility. Its high-viscosity formulation provides enhanced damping, shear stability, controlled flow, and long-term performance across mechanical, thermal, electrical, and surface treatment applications.

## Typical Physical & Technical Properties

Property	Typical Value
Appearance	Clear, colorless liquid
Chemical Structure	Linear PDMS
Kinematic Viscosity (25°C)	1000 cSt

Specific Gravity (25°C)	0.970–0.972
Refractive Index (25°C)	1.4033
Surface Tension (25°C)	20.7–21 mN/m
Flash Point	~320°C (closed cup)
Pour/Freezing Point	~–50°C
Solubility	Insoluble in water; miscible with many organic solvents
Dielectric Properties	High resistivity, low dielectric constant
CAS Number	63148-62-9

## Key Performance Features

High viscosity for superior damping, shear stability, and load support  
 Excellent thermal and chemical resistance for demanding applications  
 Low surface tension and hydrophobic behavior for superior wetting and release  
 Low volatility and high flash point for safe industrial operation  
 Strong dielectric properties suitable for electrical insulation and electronics

## Typical Applications

Mechanical & hydraulic damping: vibration control, shock absorption  
 Heat transfer fluids: thermal baths, circulation systems  
 Release agents: molds, rubber, plastics, composites  
 Industrial lubrication: elastomers, plastics, precision machinery  
 Electrical insulation / dielectric fluids: electronic assemblies, transformers  
 Surface treatments & process additives: anti-foam, coating, polishing

## Packaging & Storage

Packaging: 20 kg pails, 190 kg drums, IBC containers  
 Storage: Sealed containers, cool, dry, ventilated area  
 Shelf Life: 24 months under recommended conditions  
 Handling: Follow standard industrial hygiene; avoid prolonged skin contact