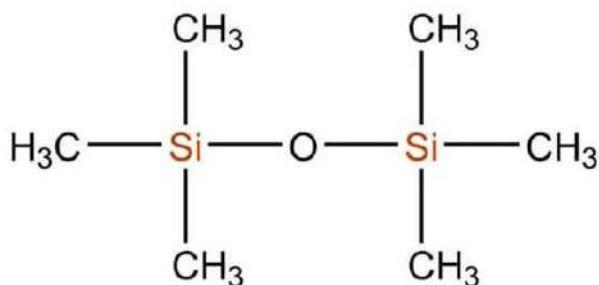


# Technical Data Sheet (TDS)

## Product Name

Silico® MF2010-20 cSt Silicone Fluid

## Chemical Structure



## Chemical Description

Linear Polydimethylsiloxane (PDMS) Silicone Oil

## Product Overview

Silico® MF2010-20 cSt Silicone Fluid is a high-purity, linear polydimethylsiloxane (PDMS) silicone oil with a nominal viscosity of 20 cSt at 25 °C. It is a clear, colorless, chemically inert fluid designed for applications requiring stable viscosity, excellent thermal resistance, electrical insulation, and superior surface wetting performance. Manufactured under strict quality control, this product provides consistent performance and long-term reliability in industrial and precision applications.

## Typical Physical & Technical Properties

Property	Typical Value
Chemical Name	Polydimethylsiloxane (PDMS)
CAS Number	63148-62-9

Appearance	Clear, colorless liquid
Kinematic Viscosity @ 25 °C	20 cSt (mm <sup>2</sup> /s)
Density @ 25 °C	0.945–0.950 g/cm <sup>3</sup>
Refractive Index @ 25 °C	~1.401
Pour Point	Approx. –80 °C
Flash Point (Closed Cup)	>240 °C
Vapor Pressure	Very low
Surface Tension @ 25 °C	~20–21 mN/m
Specific Heat @ 25 °C	~0.36 cal/g·°C
Thermal Expansion Coefficient	~0.00105 cc/cc·°C
Dielectric Constant (50 Hz)	~2.7
Dielectric Strength	~400 V/mil
Volume Resistivity	>1×10 <sup>12</sup> Ω·cm
Solubility	Insoluble in water; soluble in many organic solvents

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

## Key Performance Characteristics

- Stable 20 cSt viscosity with excellent flow and film-forming ability
- Outstanding thermal and oxidative stability
- Excellent electrical insulation and dielectric properties
- Low surface tension for enhanced wetting and lubrication
- Chemically inert, non-toxic, and odorless
- Low volatility for improved process safety

## Typical Applications

- Industrial and precision lubrication
- Electrical and electronic insulating fluid

- Damping and vibration-control systems
- Heat transfer and thermal bath fluid
- Wetting agent and carrier fluid for surface treatment

## Packaging

- 20 kg pails
- 190 kg drums
- IBC containers

## Storage & Handling

Store in sealed original containers at ambient temperature. Protect from moisture, contamination, and prolonged exposure to direct sunlight.

### Shelf Life

Minimum 24 months from date of manufacture when stored unopened under recommended conditions.