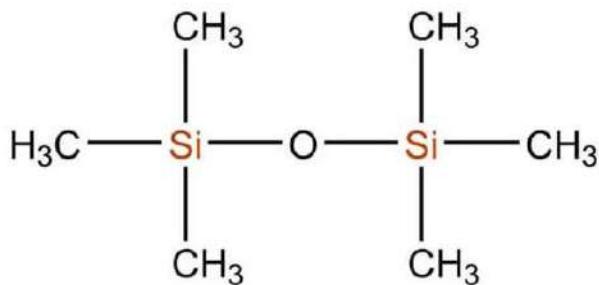


# Technical Data Sheet (TDS)

## Product Name

Silico® MF2010-10 cSt Silicone Fluid

## Chemical Structure



## Chemical Description

Linear Polydimethylsiloxane (PDMS) Silicone Oil

## Product Overview

Silico® MF2010-10 cSt Silicone Fluid is a 100% linear PDMS silicone oil with a nominal viscosity of 10 cSt at 25 °C. It is a clear, colorless, chemically inert fluid designed for applications requiring excellent flowability, thermal stability, electrical insulation, and surface wetting performance. The product is manufactured under strict quality control to ensure consistent molecular structure and reliable performance in industrial and precision applications.

## Typical Physical Properties

Property	Typical Value
Chemical Name	Polydimethylsiloxane (PDMS)
CAS Number	63148-62-9
Appearance	Clear, colorless liquid

Kinematic Viscosity @ 25 °C	10 cSt (mm <sup>2</sup> /s)
Density @ 25 °C	0.930–0.935 g/cm <sup>3</sup>
Refractive Index @ 25 °C	~1.3989
Pour Point	Approx. -70 °C
Flash Point (Closed Cup)	Approx. 160–165 °C
Vapor Pressure	Very low
Surface Tension @ 25 °C	~18–21 mN/m
Specific Heat @ 25 °C	~0.36 cal/g·°C
Thermal Expansion Coefficient	~0.00108 cc/cc·°C
Dielectric Constant (50 Hz)	~2.7
Dielectric Strength	~375 V/mil
Volume Resistivity	>1×10 <sup>12</sup> Ω·cm
Solubility	Insoluble in water; soluble in many organic solvents

*Typical values are not intended as specifications.*

## Key Performance Characteristics

- Low viscosity with excellent flow and spreading
- High thermal and oxidative stability
- Excellent electrical insulation and dielectric properties
- Low surface tension for superior wetting and lubrication
- Chemically inert, non-toxic, and odorless
- Low volatility and good safety profile

## Typical Applications

- Precision and light-duty industrial lubrication
- Electrical and electronic insulating fluid
- Damping and vibration-control systems

- 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 room temperature. Protect from moisture, contamination, and prolonged exposure to direct sunlight.

## Shelf Life

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