

Technical Data Sheet (TDS)

Silicone Oil (PDMS)

Brand: Silico®

1. Product Description

Silico® Silicone Oil is a high-purity polydimethylsiloxane (PDMS) fluid characterized by excellent thermal stability, chemical inertness, low surface tension, and consistent viscosity performance. It is suitable for a wide range of industrial applications including lubrication, heat transfer, damping systems, electrical insulation, and defoaming formulations.

2. Typical Physical & Chemical Properties

Property	Unit	Typical Value	Test Condition
Appearance	-	Clear, Colorless Liquid	Visual
Viscosity	cSt	100 / 350 / 1000 (customizable)	25 °C
Density	g/cm³	0.96	25 °C
Refractive Index	-	1.403	25 °C
Flash Point	°C	> 300	Closed Cup
Pour Point	°C	-50	-
Volatility (150°C / 2h)	%	< 1.0	-
Surface Tension	mN/m	20.5	25 °C
Thermal Stability Range	°C	-50 to +200	-

3. Typical Applications

- Industrial and mechanical lubrication
- Heat transfer fluids and thermal baths
- Damping fluids and vibration control systems
- Electrical insulation and dielectric fluids

- Defoaming agents and mold release formulations

4. Storage & Shelf Life

Store in original sealed containers at room temperature, away from direct sunlight and moisture. Under proper storage conditions, the shelf life is 24 months from the date of manufacture.

5. Disclaimer

The information provided in this Technical Data Sheet is based on laboratory tests and practical experience. The values listed are typical and should not be considered as product specifications. Users should conduct their own tests to determine suitability for specific applications.