

SILISIL Silicone Oil 5'000- 500'000 cSt.

Description

SILISIL Silicone Oil 5,000 – 500,000 cSt are high-purity, linear dimethylpolysiloxane polymers containing 100% active silicone fluid.

These oils are characterized by very low surface tension, excellent thermal stability, and high viscosity levels.

The product range is available in multiple viscosities (5,000 – 10,000 – 12,500 – 30,000 – 60,000 – 100,000 – 300,000 – 500,000 cSt), enabling their use across a wide range of industrial applications.

Examples of Applications

SILISIL Silicone Oil 5,000 – 500,000 cSt can be used as:

- Anti-adhesive agents: mould release for plastics and metal castings
- Lubricants: lubrication of elastomers and plastics on metal
- Hydraulic damping fluids
- Additives in maintenance products, such as wax polishes, floor care products, and furniture care products

Note: The selection of the appropriate product for a specific application is the sole responsibility of the user.

Key Benefits

- Excellent thermal stability
- Good resistance to combustion
- Very good dielectric properties
- Low freezing point
- Low surface tension
- High compressibility
- Good oxidation resistance
- No ageing when exposed to weathering
- Low viscosity change with temperature
- Good shear resistance
- Non-miscible with most organic materials
- Soluble in aromatic, aliphatic, and chlorinated solvents
- Insoluble in water and alcohols

Typical Properties

Property	Value
Appearance	Clear, colourless liquids
Viscosity (25 °C)	5,000–500,000 mm ² /s
Density (25 °C)	approx. 0.973
Flash point (Open Cup)	> 300 °C
Fire point	> 350 °C
Pour point	approx. -45 °C
Refractive index (25 °C)	approx. 1.404
Surface tension (25 °C)	approx. 21.1 nN/m
Vapour pressure (200 °C)	approx. 1.33 Pa
Thermal expansion coefficient (25–100 °C)	$9.45 \times 10^{-4} \text{ cm}^3/\text{cm}^3 \cdot \text{°C}$
Specific heat (40–200 °C)	1.50 J/g·K (0.36 cal/g·K)
Thermal conductivity	approx. 0.16 W/m·K
Viscosity/temperature coefficient	approx. 0.62
Dielectric strength (25 °C)	approx. 18 kV/mm
Permittivity (25 °C)	approx. 2.80
Dielectric dissipation factor (25 °C, 100 kHz)	1×10^{-4}
Volume resistivity (25 °C)	$1 \times 10^{15} \text{ } \Omega \cdot \text{m}$

Note: The typical properties listed above are intended as general reference values and not for specification purposes.

Instructions for Use

For application guidance or technical support, please contact Silitech AG.

Regulatory Information

Regulatory inquiries and documentation can be provided upon request by Silitech AG.

Limitations

For information regarding compatibility, restrictions, or use in specialized applications, please contact Silitech AG.

Storage and Shelf Life

When stored in unopened original packaging:

SILISIL Silicone Oil 5,000 – 500,000 cSt may be stored between 0 °C and +40 °C for up to 36 months from the date of manufacture.

Please observe the information on the product label.

Beyond the stated shelf life, Silitech AG can no longer guarantee compliance with sales specifications.

Disclaimer

The above information is based on current knowledge and experience. It is provided for guidance only and does not constitute a legally binding warranty. Compatibility and suitability for the intended use must be verified by the user through preliminary tests.