



TECHNICAL DATA SHEET SUPER LUBE® SILICONE OIL

March 2023

PRODUCT DESCRIPTION:

Super Lube® Silicone Oil is a straight chained polydimethylsiloxanic fluid.

Super Lube® Silicone Oil offers a low variance in viscosity as a function of temperature, operating from -58°F to 392°F (-50°C to 200°C).

Super Lube® Silicone Oil has excellent peak and prolonged shear strength with high resistance to oxidation, hydrolysis and ageing. It is chemically inert with very limited combustibility.

Super Lube® Silicone Oil is a medium viscosity silicone fluid and is widely used in flow control, temperature control and motion control technologies. It is exceptionally beneficial for instruments, gauges and devices that are subject to extreme temperatures and high pressures.

Super Lube® Silicone Oil 100cSt is an excellent choice for use in laboratory bath and heat transfer fluid applications due to the wide service temperature range, low viscosity variance at high temperatures and high dielectric strength.

The refractive index values of Super Lube® Silicone Oil makes it widely used in optics research, LED technologies and sensor technologies.

Super Lube® Silicone Oil is a pure silicone fluid that possesses excellent lubricity and is used to lubricate a wide range of rubber and plastic parts.

Super Lube® Silicone Oil is an NSF registered Food Grade lubricant, rated H1 for incidental food contact. Meets former USDA (H1) guidelines.



FEATURES:

- ❖ High and low temperature stability
- ❖ Good combustion resistance
- ❖ Superior dielectric properties
- ❖ High compressibility
- ❖ Excellent oxidation resistance
- ❖ Shear stable
- ❖ Chemically inert
- ❖ High spreading and wetting capabilities
- ❖ Environmentally friendly
- ❖ NSF Registered (H1), #151067
- ❖ Kosher Certified



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TYPICAL CONSUMER APPLICATIONS:

- ❖ Canvas
- ❖ Exercise equipment
- ❖ Tents
- ❖ Zippers
- ❖ Shoes
- ❖ Weather stripping
- ❖ Treadmills
- ❖ Rubber and plastic parts
- ❖ Windows
- ❖ Tools
- ❖ Slides
- ❖ Guide rails
- ❖ Food processing equipment

TYPICAL INDUSTRIAL APPLICATIONS:

- ❖ Power Transmission
- ❖ Controlled Speed Devices
- ❖ Fluid Catches
- ❖ Hydraulic Systems
- ❖ Rubber and Plastic Parts
- ❖ Dashpots
- ❖ Gyros
- ❖ Meters
- ❖ Shock Absorbers
- ❖ Timing Devices
- ❖ Torsional Vibration Dampers
- ❖ Damping Fluid

TYPICAL INDUSTRIAL APPLICATIONS (100 cSt, 350 cSt, and 1000 cSt):

- ❖ Flow Control
- ❖ Temperature Control
- ❖ Motion Control Technologies
- ❖ Instruments
- ❖ Gauges and devices that are subject to extreme temperature and pressures
- ❖ Laboratory and bath fluid
- ❖ Heat transfer
- ❖ Food processing chutes, bins, walls and tables in packaging and processing areas

TYPICAL INDUSTRIAL APPLICATIONS (5000 cSt):

- ❖ Humidity control instruments and humidity control gauges
- ❖ Level monitoring equipment and level measuring switches
- ❖ Underwater camera equipment
- ❖ Underwater robotics and ROV technologies
- ❖ Digital display equipment



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PACKAGE SIZES:

Part No.	Description
56104	4 oz. Bottle – 100 cSt
56101	1 gal. Bottle – 100 cSt
56105	5 gal. Pail – 100 cSt
56155	55 gal. Drum – 100 cSt
56304	4 oz. Bottle – 350 cSt
56301	1 gal. Bottle – 350 cSt
56305	5 gal. Pail – 350 cSt
56355	55 gal. Drum – 350 cSt
56404	4 oz. Bottle – 1000 cSt
56401	1 gal. Bottle – 1000 cSt
56405	5 gal. Pail – 1000 cSt
56455	55 gal. Drum – 1000 cSt
56504	4 oz. Bottle – 5000 cSt
56501	1 gal. Bottle – 5000 cSt
56505	5 gal. Pail – 5000 cSt
56555	55 gal. Drum – 5000 cSt

PROPERTIES:

Test	Characteristic	Ratings			
		100 cSt	350 cSt	1,000 cSt	5,000 cSt
Color:		Clear			Clear
Temperature Range:		-58°F to 392°F (-50°C to 200°C)	-58°F to 392°F (-50°C to 200°C)	-58°F to 392°F (-50°C to 200°C)	-58°F to 392°F (-50°C to 200°C)
Viscosity 25°C:		100	350	1,000	5,000
Viscosity/Temperature Coefficient:		.60	.60	.61	.62
Specific Gravity 25°C:		.965	.970	.970	.973
Pour Point:		-55°C			-45°C
Loss angle 25°C .5kHz and 100kHz		2.10 ⁻⁴	2.10 ⁻⁴	2.10 ⁻⁴	2.10 ⁻⁴
		1.10 ⁻⁴	1.10 ⁻⁴	1.10 ⁻⁴	1.10 ⁻⁴



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Lbs./Gallon:		8.05	8.09	8.09	8.12
Dielectric Strength 25°C, kV/mm:		16	16	16	18
DC Resistivity 25°C:		1 x 10 ¹⁵	1 x 10 ¹⁵	1 x 10 ¹⁵	1 x 10 ¹⁵
Flashpoint:	Open/Closed cup	>300°C	>300°C	>300°C	>300°C
Thermal Conductivity, W/m°C:		.16	.16	.16	.16
Specific Heat Capacity 40°C to 200°C, J/g:		1.46	1.46	1.46	1.5
Refractive Index 25°C:		1.403	1.403	1.403	1.404
Surface Tension 25°C, mN/m:		20.9	21.1	21.1	21.1
Vapor Pressure 200°C:		1.33	1.33	1.33	1.33
Volume Expansion Coefficient 25°C to 100°C:		9.45 x 10 ⁻⁴	9.45 x 10 ⁻⁴	9.45 x 10 ⁻⁴	9.45 x 10 ⁻⁴

DIRECTIONS:

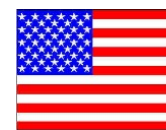
- Clean and dry area to be treated.
- Apply Super Lube® Silicone Oil.
- Re-apply as necessary.

SHELF LIFE / WARRANTY:

Super Lube® products have a five (5) year recommended shelf life when stored in the original container and in reasonable ambient conditions. The warranty period is twenty-four (24) months from the date of purchase. For complete information visit www.super-lube.com/what-is-the-shelf-life-ezp-320.html.



See Safety Data Sheet (SDS) for further details regarding safe use of this product.



Made in USA

The information provided in this Technical Data Sheet including the recommendations for use and application of the product are based on our knowledge and experience of the product as of the date of this bulletin. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Synco Chemical Corporation is, therefore not liable for the suitability of our product for the production processes and conditions in respect for which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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