



## TECHNICAL DATA SHEET SUPER LUBE® SILICONE OIL

December 2019

#### **PRODUCT DESCRIPTION:**

Super Lube® Silicone Oils are a straight chained polydimethylsiloxanic fluids.

Super Lube<sup>®</sup> Silicone Oils offer 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 Oils have excellent peak and prolonged shear strength with high resistance to oxidation, hydrolysis and ageing. They are chemically inert with very limited combustibility.

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



Super Lube<sup>®</sup> 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 temperature and high dielectric strength.

The refractive index values of Super Lube® Silicone Oils makes them widely used in optics research, LED technologies & sensor technologies.

Super Lube® Silicone Oils are pure silicone fluids that possess excellent lubricity and are used to lubricate a wide range of rubber & plastic parts.

Super Lube® Silicone Oils are NSF registered Food Grade lubricants, 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





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### **TYPICAL APPLICATIONS:**

- Dielectric fluids
- Damping fluids
- Heat transfer fluid
- Water repellant treatment
- Mold release agent
- Elastomer or plastic on metal lubricant
- High temperature oil baths

- Temperature Control
- Laboratory Bath Fluid
- Gauges
- Seals
- Pressure plug valves
- Pneumatic systems
- Flow Control Fluid
- Vacuum systems
- Instruments

- Hydraulics
- Motion Control
- Optics Research
- Food processing equipment

### **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			





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### **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		2.10 <sup>-4</sup>	2.10 <sup>-4</sup>	2.10 <sup>-4</sup>	2.10 <sup>-4</sup>
and 100kHz		1.10-4	1.10-4	1.10-4	1.10-4
Lbs./Gallon:	8	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 <sup>15</sup>	1 x 10 <sup>15</sup>	1 x 10 <sup>15</sup>	1 x 10 <sup>15</sup>
Flashpoint:	Open/Closed cup	>300°C	>300°C	>300°C	>300°C
Thermal Conductivity, W/m°C:		.16	ant.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 <sup>-4</sup>	9.45 x 10 <sup>-4</sup>	9.45 x 10 <sup>-4</sup>	9.45 x 10 <sup>-4</sup>





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### **DIRECTIONS:**

- Clean and dry area to be treated.
- Apply Super Lube<sup>®</sup> 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.





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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