



Pure Silicone Fluid 3cSt Low Temperature Bath Fluid



Product Information

Operating Temperature Range: -60°C to 20°C (open system) -60°C to 90°C (closed system)



Pure Silicone Fluid 3cSt Low Temperature Bath Fluid has a service temperature range of -60°C.

Clearco **Pure Silicone Fluid 3cSt Low Temperature Bath Fluid** is a clear, colorless, and odorless low-viscosity linear Polydimethylsiloxane (CAS # 63148-62-9) that is formulated for use as a low temperature baths fluid and a low temperature heat transfer fluid.

In open system baths, the PSF-3cSt Low Temperature Silicone Bath Fluid has an operating temperature range of -60°C to 20°C. Due to its low flash point and volatility, it is not recommended for open system above ambient (high rate of evaporation will require frequent replenishment). However, in closed system baths*, the PSF-3cSt has a wider operating temperature range of -60°C to 90°C.

PSF-3cSt Low Temperature Silicone Bath Fluid has a low viscosity-temperature coefficient or V.T.C. (viscosity @99°C ÷viscosity @ 38°C). Thus, its viscosity will not increase significantly even increase significantly even at extremely low temperatures. For example, at -40°C, its viscosity increases to only 20cSt. This is critical for baths that have pumping systems that cannot operate with higher viscosity fluids.

Bath Applications include: low temperature open system baths, low temperature closed system baths, low temperature constant temperature baths, low temp circulating baths, refrigerated baths, closed loop baths, heat transfer baths, heat transfer fluid in freeze drying equipment, thermostats

*Closed system baths are systems from which air has been excluded

Features

- 100% silicone fluid
- Low viscosity: 3cSt @ 25°C
- Excellent Low Temp Serviceability
- Excellent Low Temp heat transfer fluid
- Hydrophobic – insoluble with water
- Compatible with virtually all o-rings, gaskets, hoses, valves and seals*
- Chemically Inert
- Clear, Colorless, Odorless
- Low V.T.C – 0.51
- Low Vapor pressure
- Low Pour Point: -70°C
- Flash Point: 100°C
- High Resistance to Oxidation
- VOC Exempt

*Not recommended for silicone o-rings where the fluid may cause swelling.

Specifications

Chemical name	Polydimethylsiloxane
Synonym	Dimethylsiloxane
Appearance	Clear Liquid – colorless, odorless
Availability	1 – 5 – 55 gallon
Packaging	2.5kg in 1-gallon container 15kg in 5-gallon container 170kg in 55-gallon drum
Minimum Order	1-gallon

Packaging: 3 Centistokes

1-gallon container.....	2.5kg
5-gallon Container.....	15kg
55-gallon drum.....	170kg
Terms: F.O.B. Phila, PA U.S.A.	

CAS Information

Identity	CAS #	%
Polydimethylsiloxanes	63148-62-9	>80
Dodecamethylpentasiloxane	141-63-9	<20
Decamethyltetrasiloxane	141-62-8	<5
Octamethylcyclotetrasiloxane	556-67-2	<2

Typical Product Data

Specific Gravity	Viscosity-Temp Coefficient	Flash Point	Pour Point	Refractive Index	Coefficient of Thermal Expansion cc/cc/°C 0-150°C	Thermal Conductivity @ 25C g/cal/cm/sec °C	Surface Tension	Dielectric Constant	Dielectric Strength
0.898	0.51	100°C	-70°C	1.3935	0.00114	0.00027	19.2	2.50	350

Typical Product Data (cont'd)

Boiling Point	Vapor Density (air = 1)	% Volatile	Molecular weight	Vapor Pressure @ 25°C
>105°C	NA	NA	550	Not determined

For More Information, Contact:

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