



Pure Silicone Fluid 5cSt Low Temperature Bath Fluid



Product Information

Operating Temperature Range: -50°C to 65°C (open system) / -50°C to 120°C (closed system)



Pure Silicone Fluid 5cSt Low Temperature Silicone Bath Fluid is a low viscosity 100% silicone that is serviceable at -50°C.

Clearco **Pure Silicone Fluid 5cSt 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, PSF-5cSt Low Temperature Silicone Bath Fluid has an **operating temperature range of -50°C to 65°C**. In **closed system***, the operating temperature range is wider due to the absence of air. The **closed operating range is -50°C to 130°C**.

PSF-5cSt Low Temperature Silicone Bath Fluid has a low viscosity-temperature coefficient or V.T.C. (viscosity @99°C ÷viscosity @ 38°C). Thus, it will not exhibit a wide viscosity increase at the lower temperatures. For example, at -40°C, its viscosity increases to only 40cSt. 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, constant temperature baths, circulating baths, low temperature refrigerated baths, closed loop baths, heat transfer baths, heat transfer fluid in freeze drying equipment, thermostats and cryostats

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

Specifications

Chemical Name	Polydimethylsiloxane
CAS #	63148-62-9
Appearance	Clear Liquid – Odorless & Tasteless
Viscosity Class	Low
Non-Flammable	Yes
Thermally Stable	Yes
Availability	1 – 5 – 55 gallon containers
Minimum Order	1-gallon

Features

- 100% silicone fluid
- Low viscosity: 5cSt @ 25°C
- Excellent Low Temp Serviceability
- Hydrophobic – insoluble with water
- Compatible with virtually all o-rings, gaskets, hoses, valves and seals*
- Chemically Inert
- Clear, Colorless, Odorless Fluid
- Low Viscosity-temp-coefficient (V.T.C)... 0.54
- Low Vapor pressure
- Low Service temperature range of -50°C
- Low Pour Point: -65°C
- Flash Point: 135°C
- High Resistance to Oxidation
- VOC Exempt

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

Viscosity @ temperature

Viscosity-Temperature-coefficient...0.54
Viscosity @ 25°C.....5cSt (centistokes)
Viscosity @ 0°C.....8cSt
Viscosity @ -20°C.....14cSt
Viscosity @ -40°C.....40cSt

* Packaging: 5 Centistokes

1-gallon container.....	3.25kg
5-gallon container.....	16.25kg
55-gallon drum.....	180kg
F.O.B. Phila, PA	

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
0.918	.54	135°C	-65°C	1.3970	0.00114	0.00027	19.7	2.60	375

Typical Product Data (cont'd)

Boiling Point	Vapor Density (air = 1)	Max volatility, % wt loss @ 150°C	Molecular weight	Vapor Pressure @ 25°C
>105°C	NA	90	770	Not determined

For More Information, Contact:

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