



Product Information

Pure Silicone Fluid 2cst Low Temperature Bath Fluid

Operating Temperature Range: -80°C to 60°C closed system only



Pure Silicone Fluid 2cst Low Temperature Bath Fluid has a service temperature range of -80°C to 60°C (closed system only)

Pure Silicone 2cSt Low Temperature Bath Fluid is a clear, colorless and odorless low-viscosity linear Polydimethylsiloxane that is formulated for Low Temperature Baths and Low Temperature Heat Transfer Applications.

In closed system baths, PSF-2cSt Low Temperature Bath Fluid has an operating service temperature range of -80°C to 60°C. Due to its low flash point and high rate of evaporation, PSF-2cSt is not recommended for open bath systems. Fast rate of evaporation will require frequent replenishment of the fluid.

PSF-2cSt has a low viscosity-temperature coefficient or VTC (viscosity @99°C ÷viscosity @ 38°C). The lower the VTC, the lower the viscosity at lower temps. Thus, its viscosity will not increase significantly even at extremely low temperatures. For example, at -60°C, the viscosity of PSF-2cSt is <20cSt. This is critical for baths that have pumping systems that cannot operate with higher viscosity fluids.

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

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

Features

- Super low viscosity – provides excellent low temperature pumpability
- Clear, colorless and odorless fluid – easy to see instruments inside of the bath
- Excellent Low Temperature Serviceability
- Low Temperature heat transfer fluid
- VOC Exempt
- High Compressibility
- High Oxidation Resistance
- Insoluble in water
- Compatible with virtually all o-rings, gaskets, valves and seals *

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

Viscosity/Temperature

Viscosity-Temp Coefficient (V.T.C.)..... 0.48

Viscosity @25°C.....2cSt

Viscosity

@-35°C.....8cSt

@-40°C.....10cSt

@-60°C.....<20cSt

Properties

Appearance: clear, colorless, odorless	Viscosity @ 25C.....2cSt
Pour Point.....<-120°C	<u>Operating temperature stability</u>
Flash point..... 75°C	Closed system.....-100°C to 60°C
Boiling Point (0.5mm, °C).....229°C	<u>Dielectric Properties</u>
Specific gravity: 0.873	Dielectric Constant.....2.39
Refractive Index: 1.391	Dielectric Strength350 volts/mil
Thermal Expansion (cc/cc/C, 0-150°C).....0.00117	Vapor Density (air =1).....>1
Coefficient of Thermal Conductivity g/cal/cm/sec °C.....2.6	Vapor Pressure @ 25°C.....1mmHg
Specific Heat @ 25°C.....0.410 cal/g/°C	Volatility @ 150°C (open system)..... 100%
Volume Resistivity @ 25°C (ohm-cm).....5.0 x 10 ¹⁴	Evaporation Rate (butyl acetate = 1): <1
	Molecular weight.....410
	Surface Tension.....18.7

* PRICING: 2 Centistokes

1-gallon pail.....2.5kg

5-gallon pail.....15kg

55-gallon drum.....170kg

Terms F.O.B. Phila, PA U.S.A.

CAS Information

Identity	CAS #	%
Dodecamethylpentasiloxane	141-63-9	100

For More Information, Contact:

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