



Product Information

PSF-20cSt Silicone Bath Fluid

Operating Temperature Range: -50°C to 120°C (open system) / -50C to 220°C (closed system)



PSF-20cSt Bath Fluid is effective in both low and medium temp baths and heat transfer applications.

PSF-20cSt Silicone Bath Fluid is a clear, colorless, odorless low-viscosity linear Polydimethylsiloxane (CAS # 63148-62-9) that is strongly recommended for use as a low and medium temperature baths fluid, and a low and medium temperature heat transfer fluid.

In open system baths, PSF-20cSt Silicone Bath Fluid has an operating temperature range of -50°C to 120°C. In closed system*, the operating temperature range is wider due to the absence of air. The closed system operating temperature range is -50°C to 220°C.

PSF-20cSt Silicone Bath Fluid has a low viscosity-temperature coefficient or V.T.C. (viscosity @99°C ÷viscosity @ 38°C). Thus, its viscosity will not significantly increase even at extremely low temperatures. For example, at -40°C, its viscosity increases to only 125cSt. This is critical for baths that have pumping systems that cannot operate with higher viscosity fluids.

Bath Applications include: open system baths, closed system baths, constant temperature baths, circulating baths, chiller baths, low temperature refrigerated baths, closed loop baths, heat transfer medium

Specifications

Product code	PSF-20cSt
Chemical Name	Polydimethylsiloxane
CAS #	63148-62-9
Appearance	Clear, colorless liquid
Viscosity Class	Low
Non-Flammable	Yes
Minimum Order	1-gallon (3.785 liters)

Viscosity @ temperature

Viscosity-Temperature-coefficient	0.59
Viscosity @ 25°C	20cSt
Viscosity @ 0°C	35cSt
Viscosity @ -20°C	60cSt
Viscosity @ -40°C	125cSt

Features

- 100% silicone fluid
- Non-Flammable
- Excellent Low & Medium Temp Serviceability
- Hydrophobic – insoluble with water
- Compatible with virtually all o-rings, gaskets, hoses, valves and seals*
- Chemically Inert
- Low Service Temperature Range
- Clear, Colorless, Odorless
- Low V.T.C...viscosity remains low even at very low temps
- Low Vapor pressure
- Low Pour Point: -65°C
- Flash Point: 232°C
- High Resistance to Oxidation

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

Typical Product Data

Specific Gravity	Refractive Index	Pour Point	Flash Point	Boiling Point	Surface Tension	Thermal Conductivity @ 25°C g/cal/cm/sec °C	Thermal Expansion cc/cc °C	Volatile content @ 150°C	Specific Heat @ 25°C J/g °C
0.950	1.4000	-65°C	232°C	>230 °C	20.6	0.00034	0.00107	4.5%	1.6

Packaging

1-gallon	3.6kg net wt.
5-gallon pail	18kg net wt.
55-gallon drum	190kg net wt.
F.O.B. Phila, PA U.S.A.	

Typical Product Data (cont'd)

Volume Resistivity	Molecular weight	Dielectric constant 50Hz	Dielectric strength volts/mil
≥1	2,000	2.72	375

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