



Product Information

PSF-100cSt Silicone Bath Fluid

Operating Temperature Range: -40°C to 170°C (open system) / -40C to 230°C (closed system)



PSF-100cSt Bath Fluid offers high thermal stability for open/closed system baths and heat transfer applications...it is our standard recommended bath fluid

PSF-100cSt Silicone Bath Fluid is 100% linear Polydimethylsiloxane with a viscosity of 100cSt (centistokes) @ 25°C. PSF-100cSt Bath Fluid is a clear, colorless and odorless fluid that is inert to virtually all plastic surfaces and bath instruments. The fluid is characterized by its point, wide service temperature range, high flashpoint, low viscosity change at temperature, low vapor pressure, high resistance to oxidation and inertness to virtually all bath components.

PSF-100cSt Silicone Bath Fluid is our recommended fluid for open/closed system baths and heat transfer applications that require a wide service temperature range. In **open system** baths, PSF-100cSt Medium Temperature Silicone Bath Fluid has an **operating temperature range of -40°C to 170°C**. At 150°C, PSF-100cSt will remain stable for approximately 1-year. In **closed system***, the operating temperature range is wider due to the absence of air. The **closed system operating range is -40°C to 230°C**.

PSF-100cSt 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 -20°C, its viscosity only increases to 300cSt while at 150°C, it lowers to 15cSt. 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, low temperature refrigerated baths, closed loop baths, heat transfer medium.

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

Viscosity/Temp Specs.

Viscosity-Temperature Coefficient.....	0.60
Viscosity @ temperature:	
@ 150°C.....	17cSt
@ 100°C.....	30cSt
@ 25°C.....	100cSt
@ 0°C.....	160cSt
@ -20°C.....	300cSt

Features

- 100% PDMS Silicone fluid
- clear, colorless & odorless fluid
- Viscosity: 100cSt @ 25°C
- Non-Flammable
- High Thermal Stability
- Wide service temperature range
- Hydrophobic – insoluble with water
- Compatible with virtually all o-rings, gaskets, hoses, valves and seals*
- Clear, Colorless, Odorless
- Low V.T.C – 0.60
- Low Vapor pressure
- Low Pour Point: -55°C
- Flash Point: 315°C
- High Resistance to Oxidation

Gel time @ Temperature (open system)

149°C	204°C	250°C	260°C	300°C
Approx 1-year	250 to 300 hours	40 to 60 hours	20 to 25 hours	<24 hours

Typical Product Data

Specific Gravity	Refractive Index	Pour Point	Flash Point	Boiling Point	Surface Tension Dynes cm @ 25° C	Thermal Conductivity @ 25°C g/cal/cm/sec °C	Thermal Expansion cc/cc/C, °C	Maximum Volatile content @ 150°C, wt loss, 24 hrs	Specific Heat @ 25°C cal/g °C
0.966	1.4025	-55°C	315°C	>250 °C	20.9	0.00037	0.00096	0.5%	0.360

Packaging

1-gallon.....	3.6kg net wt.
5-gallon pail.....	18kg net wt.
55-gallon drum.....	200kg net wt.
F.O.B. Phila, PA U.S.A.	

Product Data (cont'd)

Dielectric Constant 50Hz	Dielectric Strength volts/mil	Molecular weight
2.75	400	5,970

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