



Product Information

PSF-100cSt Dielectric Silicone Fluid

Dielectric Strength: 400 volts/mil Operating Temperature Range: -40°C to 230°C (closed system)



PSF-100cSt Dielectric Silicone Fluid offers high dielectric strength over a wide service temperature range.

PSF-100cSt Dielectric Silicone Fluid is a clear, colorless and odorless linear Polydimethylsiloxane with a viscosity of 100cSt @ 25°C. The fluid is characterized by its high dielectric strength, wide service temperature range, high flash point, low viscosity change at temperature (low V.T.C.), low surface tension, long service life, and hydrophobic nature (insoluble in water).

PSF-100cSt Dielectric Silicone Fluid has a dielectric strength of 400 volts/mil and a dielectric breakdown strength (2.5mm) ≥ 50 kV. **PSF-100cSt Dielectric Silicone Fluid** has a Thermal Conductivity value of 0.00037 g/cal/cm/sec °C. Its specific heat value is 1.5 (J/g °C).

PSF-100cSt Dielectric Silicone 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.

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

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

Viscosity/Temp Specs.

Viscosity-Temperature Coefficient.....	0.60
Viscosity @ temperature	
@ 15°C.....	17cSt
@ 100°C.....	30cSt
@ 25°C.....	100cSt
@ 0°C.....	160cSt
@ -20°C.....	300cSt

Dielectric Properties

Dielectric Strength	400 volts/mil
Dielectric breakdown strength (2.5mm).....	≥ 50 kV
Dielectric Constant (50Hz)..... 2.75 @ 25°C	
Dielectric Constant (100Hz)....	2.71 @ 25°C
	2.35 @ 150°C
Dissipation Factor (100Hz)	
@ 25C.....	0.0002
@ 150C.....	0.00016
Volume Resistance (ohm-cm)	
@ 25°C.....	1.0×10^{15}
@ 150°C	5×10^{13}

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	Specific Heat @ 25°C J/g °C
0.966	1.4025	-55°C	315°C	>250°C	20.9	0.00037	0.00096	1.5

Gel time of Pure Silicone Fluid 100cSt @ 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

Packaging

1-gallon.....	3.6kg
5-gallon pail.....	18kg
55-gallon drum.....	200kg

For More Information, Contact:

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