



Product Information

PSF-100cSt Silicone Heat Transfer Fluid

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



PSF-100cSt Silicone Heat Transfer Fluid has a wider service temperature of -40°C to 230°C.

PSF-100cSt Silicone Heat Transfer Fluid is a clear, colorless and odorless linear Polydimethylsiloxane that is formulated for use as a cold and heat transfer medium in a wide range of applications. **PSF-100cSt Silicone Heat Transfer Fluid** has an operating service temperature range of -50°C to 220°C (closed system*).

PSF-100cSt Silicone Heat Transfer Fluid is characterized by its low pour points, high flash point, wide service temperature range, low viscosity change at temperature (low V.T.C.), low surface tension, long service life, high dielectric strength and hydrophobic nature (insoluble in water).

PSF-100cSt Silicone Heat Transfer 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 Heat Transfer 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 increases to 300cSt while at 150C, it lowers to 15cSt. This is critical for baths that have pumping systems that cannot operate with higher viscosity fluids.

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 |

Features

- 100% silicone fluid
- clear, colorless & odorless
- 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 | 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 | 20.9 | 0.00037 | 0.00096 | 1.5 |

Dielectric Properties

| Dielectric Constant 50Hz | Dilectric Strength volts/mil |
|--------------------------|------------------------------|
| 2.75 | 400 |

Packaging

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

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