



Product Information

PSF-10cSt Silicone Heat Transfer Fluid

Operating Temperature Range: -60°C to 200°C (closed system)



PSF-10cSt Silicone Heat Transfer Fluid is an excellent choice for systems that require a low viscosity fluid and a wide service temperature range.

PSF-10cSt Silicone Heat Transfer Fluid is a clear, colorless and odorless low-viscosity linear Polydimethylsiloxane (CAS No. 63148-62-9) that is formulated as a cold and heat transfer medium in a wide range of applications. **PSF-10cSt Low Temperature Silicone Bath Fluid** has an operating service temperature range of -60°C to 150°C (closed system*).

PSF-10cSt Silicone Heat Transfer Fluid is characterized by its low pour points, low temperature stability, wide service temperature range, low viscosity change at temperature (low V.T.C.), low surface tension, long service life, and hydrophobic nature (insoluble in water).

PSF-10cSt Silicone Heat Transfer Fluid has a Thermal Conductivity value of 0.00032 g cal/cm•sec• °C. Its specific heat value is 0.360 cal/g/°C @ 25°C.

PSF-10cSt Silicone Heat Transfer Fluid has a low viscosity-temperature coefficient or V.T.C. (viscosity @99°C ÷ viscosity @ 38°C). The lower the VTC, the lower the viscosity changes at temperature. Thus, its viscosity will not significantly increase even at extremely low temperatures. For example, at -40°C, its viscosity increases to only 75cSt. This is critical for baths that have pumping systems that cannot operate with higher viscosity fluids.

Applications include: low temperature heat transfer systems, heat transfer fluid in freeze drying equipment, calibration bath fluids for low temperature, low temperature closed system baths, low temperature constant temperature baths, low temperature circulating baths, low temperature circulator baths, low temperature refrigerated baths, low temperature closed loop baths,

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

Specifications

Chemical Family	PDMS Silicone
Chemical Name	Polydimethylsiloxane
CAS#	63148-62-9
Appearance	Clear, colorless, odorless
Non-Flammable	Yes
Thermally Stable	Yes
Availability	1 – 5 – 55 gallon drums
Minimum Order	1-gallon (3.785 liters)

Features

- 100% PDMS Silicone Fluid
- Clear, Colorless, Odorless
- Low V.T.C...0.56
- Low Vapor pressure
- Low Pour Point: -70°C
- Wide Service Temperature Range
- Hydrophobic: insoluble with water
- Chemically Inert

Typical Product Data

Viscosity @ 25°C	Specific Gravity	Refractive Index	Viscosity-Temp Coefficient	Pour Point	Flash Point closed cup	Boiling Point	Surface Tension dynes cm @ 25°C	Volatile content @ 70°C
10cSt	0.935	1.3989	0.56	-70°C	163°C	>200 °C	20.1	0.68%

Thermal Properties

Thermal Conductivity @ 50°C g cal/cm•sec• °C	Specific Heat @ 25°C cal/g °C	Thermal Expansion cc/cc °C
0.00032	0.360	0.00108

Dielectric Properties

Volume Resistivity	Dielectric constant 50Hz	Dielectric strength volts/mil
≥1	2.68	375

Viscosity @ temperature

Viscosity-Temperature-coefficient.....	0.56
Viscosity @ 25°C.....	10cSt (centistokes)
Viscosity @ 0°C.....	17cSt
Viscosity @ -20°C.....	30cSt
Viscosity @ -40°C.....	75cSt

Packaging

1-gallon (3.78 liters)	3.52kg net wt.
5-gallon pail (18.9 liters).....	17.6kg net wt.
55-gallon drum (208 liters)	190kg net wt.

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

For More Info, Contact: Clearco Products Co., Inc.

15 York Road
Willow Grove, PA 19090
U.S.A.

Tel: (215) 366-7860

Fax: (215) 366-7862

Email: info@clearcoproducts.com

Web: www.clearcoproducts.com