



## Product Information

### PSF-2cst Dielectric Silicone Fluid

**Dielectric Strength: 350 volts/mil Operating Temperature Range: -80°C to 120°C closed system only**



*PSF-2cst Dielectric Silicone Fluid is an excellent fluid for applications that require low temp stability and high dielectric strength.*

**PSF-2cst Dielectric Silicone Fluid** is a clear, colorless and odorless low-viscosity linear Polydimethylsiloxane (CAS # 63148-62-9) with a viscosity of 2cSt @ 25°C. **PSF-2cst Dielectric Silicone Fluid** is characterized by its high dielectric strength, low pour point, 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-2cst Dielectric Silicone Fluid** has a dielectric strength of 350 volts/mil and a dielectric breakdown strength (2.5mm)  $\geq 35$  kV. **PSF-2cst Dielectric Silicone Fluid** has an operating service temperature range of -80°C to 120°C (closed system\*).

**PSF-2cst Dielectric Silicone Fluid** has a Thermal Conductivity value of 0.11 W/m sec °C. Its specific heat value is 1.8 J/g °C @ 25°C.

**PSF-2cst Dielectric Silicone Fluid** has a low viscosity-temperature coefficient or V.T.C. (viscosity @99°C ÷ viscosity @ 38°C). The lower the V.T.C., the lower the viscosity will be at lower temps. Thus, its viscosity will not increase significantly even at extremely low temperatures.

#### Features

- Super low viscosity : 2cSt (centistokes)
- Excellent Low Temperature Serviceability
- Low Temperature heat transfer fluid
- VOC Exempt
- High Compressibility
- High Oxidation Resistance
- Insoluble in water
- Compatible with virtually all o-rings, gaskets, valves and seals \*

*\*Not recommended for silicone o-rings where the fluid may cause swelling*

#### Dielectric Properties

##### Dielectric Properties

Dielectric Strength .....350 volts/mil

Dielectric breakdown strength (2.5mm)..... $\geq 35$  kV

Dielectric Constant (50Hz).....2.45 @ 25°C

Dielectric Constant (100Hz).... 2.44 @ 25°C  
2.12 @ 150°C

Dissipation Factor (100Hz)

@ 25°C.....0.0004

@ 150°C.....0.0004

Volume Resistance (ohm-cm)

@ 25°C..... $5.0 \times 10^{14}$

@ 150°C ..... $1.0 \times 10^{13}$

#### Typical Product Data

Specific Gravity	Viscosity-Temp Coefficient	Flash Point	Boiling Point	Pour Point	Refractive Index	Thermal Expansion cc/cc °C	Thermal Conductivity W/m °C	Specific Heat J/g °C	Surface Tension
0.873	0.48	75°C	229°C	-100°C	1.3900	0.00117	0.11	1.8	18.7

#### Typical Product Data (cont'd)

Vapor Density (air = 1)	Vapor Pressure @ 25°C	Molecular weight
>1	1mmHg	410

#### Viscosity/Temperature

Viscosity-Temp Coefficient (V.T.C.)..... 0.48

Viscosity @ 25°C.....2cSt

Viscosity

@ -35°C......8cSt

@ -40°C .....10cSt

@ -60°C.....<20cSt

#### Packaging

1-gallon pail (3.78 liters) .....3.2kg

5-gallon pail (18.9 liters) .....16kg

55-gallon drum (208 liters) .....170kg

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](mailto:info@clearcoproducts.com)

Web: [www.clearcoproducts.com](http://www.clearcoproducts.com)