

# Product Information

## PSF-10cSt Silicone Damping Fluid

### PDMS Silicone Fluid...Meets VV-D-1078 "Silicone as Damping Fluid"



PSF-10cSt Silicone Damping Fluid meets VV-D-1078 "Silicone as Damping Fluid".

**PSF-10cSt Damping Fluid** is a low viscosity linear PDMS Silicone / Polydimethylsiloxane (CAS#63148-62-9) fluid with a viscosity of 10cSt (centistokes) @ 25°C.

**PSF-10cSt Damping Fluid** is a hydrophobic fluid that is characterized by its low viscosity, low pour point (-70°C), low V.T.C. (little viscosity change even at extremely low temperature), low surface tension (high spreadability), excellent lubrication & high damping action

**PSF-10cSt Damping Fluid** meets Federal Spec **VV-D-1078** "Silicone as Damping Fluid and exhibits Newtonian behavior under shear. It is used in a wide range of military and industrial liquid filled gauges, level controllers, rotary dampers, temperature and process recorders, control valves, calibration equipment, flow meters, thermostats, dashpots, monitoring systems avionic gauges and aviation instruments to dampen vibration, dampen pulsation, and dampen torque.

**PSF-10cSt Damping Fluid** is particularly effective for use in instruments and gauges that will operate at a wide service temperature range. The fluid is hydrophobic and prevents humidity from entering the gauge/instrument housing. This is very important. At low temperatures, water condensation can freeze and cause damage to the sensitive parts within the gauge/instrument housing. Ultimately, **Silicone Damping Fluids** will extend the service life of the equipment that it fills and provide more accurate readings even in the harshest of conditions.

#### **Specifications**

Product code	PSF-10cSt
Chemical Family	PDMS Silicone
Chemical Name	Polydimethylsiloxane
Synonym	Dimethicone
CAS#	63148-62-9
Appearance	Clear, colorless, odorless
Non-Flammable	Yes
Federal Spec	VV-D-1078
Meets specifications	NSN 9150-00-664-0111
of NSN No's	NSN 9150-00-607-0897
Minimum Order	1-gallon (3.785 liters)

#### **Features**

- Dampen vibration in gauges, instruments, meters and avionic instruments
- Protects internal components against vibration, freezing and corrosion.
- Extends service life of gauges, instruments, meters and avionic instruments.
- Wide Service Temperature Range
- Low viscosity change at temperature (low V.T.C.)
- Inert to virtually all o-rings, gaskets, seals and valves \*
- Meets NSN 9150-00-664-0111
- Meets NSN 9150-00-607-0897
- High Dielectric Strength
  - \* not recommended for Silicone o-rings due to possibility of swelling

### Properties

Specific Gravity	Refractive Index	Pour Point	Flash Point (closed cup)	Surface Tension	Thermal Conductivity @ 25°C g/cal/cm/sec °C	Thermal Expansion cc/cc °C	Volatile content @ 70°C	Specific Heat @ 25°C
0.935	1.3990	-70ºC	163ºC	20.1	0.00032	0.00108	0.68%	0.360

#### Properties (cont'd)

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Dielectric	Dielectric Strength	Boiling	Molecular
Constant	Volts/mil	Point	weight
2.68	375	>200°C	1,250

#### **Packaging**

1-gallon3.52kg net wt.
5-gallon pail17.6kg net wt.
55-gallon drum190kg net wt.
F.O.B. Phila, PA U.S.A.

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