



PSF-0.65cSt Silicone Damping Fluid

Lowest Viscosity linear Polydimethylsiloxane: HMDS Hexamethyldisiloxane (CAS#107-46-0)



HMDS Hexamethyldisiloxane fluid is a VOC Exempt Fluid that is an excellent replacement for non-VOC compliant petroleum distillates and solvent carrying agents

PSF-0.65cSt Damping Fluid is a super-low viscosity linear Polydimethylsiloxane composed of Hexamethyldisiloxane (CAS#107-46-0). The fluid is clear, colorless and essentially odorless with a viscosity of 0.65cSt (centistokes) @ 25°C...thinner viscosity than water.

PSF-0.65cSt Damping Fluid is a hydrophobic fluid that is characterized by its low viscosity (lowest viscosity), low pour point (-68°C), low VTC (little viscosity change even at extremely low temperature), low surface tension (high spreadability), excellent lubrication, high damping action and fast rate of evaporation.

PSF-0.65cSt 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-0.65cSt Damping Fluid is particularly effective for use in instruments and gauges that will operate at extremely low temperatures (pour points is -68°C). It 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-0.65cSt
Chemical Family	Polydimethylsiloxane
Chemical name	Hexamethyldisiloxane
CAS No.	107-46-0
Formula	C ₆ H ₁₈ OSi ₂
Synonym	HMDS
Appearance	Clear Liquid – Odorless & Tasteless
Flammability	HMIS 4
Federal Spec	VV-D-1078 Silicone as damping fluid
Meets NSN No.	NSN 9150-01-055-5995 NSN 9150-00-550-7000
Minimum Order	1 gallon (2.8kg)

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.
- Excellent low service temperature range
- Low viscosity change at temperature (low V.T.C.)
- Inert to virtually all o-rings, gaskets, seals and valves *
- High Dielectric Strength

* not recommended for Silicone O-rings due to possibility of swelling

Typical Product Data

Viscosity	Specific Gravity	Viscosity-temp coefficient	Flash Point	Pour Point	Refractive Index	Thermal Expansion cc/cc °C	Thermal conductivity g/ca/cm/sec °C	Surface Tension	Dielectric Constant	Dielectric Strength volts/mil
0.65cSt	0.761	0.31	-1°C	-68°C	1.3750	0.00134	0.00024	15.9	2.20	300

Product Data (cont'd)

Boiling Point	Vapor density	Vapor Pressure @ 25C	Evaporation Rate Butyl acetate = 1
100°C	>1	35mmHg	>1

CAS Information

Hexamethyldisiloxane (100%)... CAS # 107-46-0

* Highly flammable liquid

Packaging

1-gallon.....2.5kg net wt.
5-gallon pail.....14kg net wt.
55-gallon drum.....150kg 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