



## Product Information

### PSF-Silicone Damping Fluids (standard viscosities)

100% PDMS Silicone Oil (CAS No. 63148-62-9) Viscosities: 50cSt, 100cSt, 200cSt, 350cSt, 500cSt, 1,000cSt



PSF Damping Fluids are linear 100% Polydimethylsiloxane / PDMS Silicone fluids

**PSF-Medium Viscosity Silicone Damping Fluids** are linear 100% Polydimethylsiloxane (CAS#63148-62-9) / PDMS Silicone fluids with viscosities of 50cst, 100cSt, 200cSt, 350cSt, 500cSt & 1,000cSt (centistokes) measured @ 25°C.

**PSF-Silicone Damping Fluids** are characterized by their hydrophobic nature, wide service temperature range, low V.T.C. (low viscosity change at temperature), high damping action and inertness.

PSF-Silicone Damping Fluids meet the composition requirements (100% Polydimethylsiloxane/Dimethyl Polysiloxane) of VV-D-1078 Silicone as Damping Fluid. \*

They are used in a wide range of military and industrial applications to dampen vibration, dampen pulsation, and dampen torque in liquid-filled gauges, level controllers, rotary dampers, temperature and process recorders, control valves, calibration equipment, flow meters, thermostats, & monitoring systems.

**PSF-Silicone Damping Fluids** are particularly effective for use in instruments and gauges that will operate at a wide service temperature range.

\* PSF-Fluids are not formally certified or tested to VV-D-1078.

#### Specifications

|               |                        |
|---------------|------------------------|
| Chemical Name | Polydimethylsiloxane   |
| CAS #         | 63148-62-9             |
| Appearance    | Clear, colorless fluid |

#### Meets Composition Requirements of NSN No.

|              |  |
|--------------|--|
| PSF-50cSt    | NSN 9150-00-664-0047<br>NSN 9150-00-664-0048                         |
| PSF-100cSt   | NSN 9150 00-269-8246<br>NSN 9150-00-404-3435<br>NSN 9150-01-233-9897 |
| PSF-200cSt   | NSN 9150-00-584-3134   |
| PSF-350cSt   | NSN 9150-00-851-4257   |
| PSF-500cSt   | NSN 9150-00-024-9621<br>NSN 9150-00-261-8327<br>NSN 9150-01-056-9047 |
| PSF-1,000cSt | NSN 9150-00-024-9623   |

#### 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
- High Oxidation resistance
- High Resistance to shear
- Low viscosity changes at temperature (low V.T.C.)
- Compatible with virtually all O-rings, gaskets, seals and valves \*
- High Dielectric Strength

\* Not recommended for Silicone O-rings due to potential of swelling

#### Typical Product Data

| Viscosity (cSt) | Specific Gravity | Refractive Index | Pour Point | Flash Point (open cup) | V.T.C | Surface Tension | Thermal Expansion (cc/cc/c 0-150°C) | Thermal Conductivity g/cal/cm/sec °C | Maximum Volatility @ 150°C (%wt) | Specific Heat BTU/lb. °F |
|-----------------|------------------|------------------|------------|------------------------|-------|-----------------|-------------------------------------|--------------------------------------|----------------------------------|--------------------------|
| 50              | 0.960            | 1.402            | -55°C      | 285°C                  | 0.59  | 20.8            | 0.00106                             | 0.00036                              | 0.5                              | 0.36                     |
| 100             | 0.966            | 1.4030           | -55°C      | 315°C                  | 0.60  | 20.9            | 0.00096                             | 0.00037                              | 0.5                              | 0.36                     |
| 200             | 0.968            | 1.4031           | -50°C      | 315°C                  | 0.60  | 21.0            | 0.00096                             | 0.00037                              | 0.5                              | 0.36                     |
| 350             | 0.970            | 1.4032           | -50°C      | 315°C                  | 0.60  | 21.1            | 0.00096                             | 0.00037                              | 0.5                              | 0.36                     |
| 500             | 0.971            | 1.4033           | -50°C      | 315°C                  | 0.60  | 21.1            | 0.00096                             | 0.00038                              | 0.5                              | 0.36                     |
| 1,000           | 0.971            | 1.4035           | -50°C      | 315°C                  | 0.61  | 21.2            | 0.00096                             | 0.00038                              | 0.5                              | 0.36                     |

#### Packaging

|   |
|---|
| 1-gallon (3.785L).....3.6 kg net wt.    |
| 5-gallon pail (18.9L).....18kg net wt.  |
| 55-gallon drum (208L).....200kg net wt. |
| F.O.B. Phila, PA U.S.A.                 |

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