

# Product Information

# PPM-500 Phenylmethyl Silicone Fluid

## 500cSt Fluid (clear, super hi-temperature stability) Highest phenyl content [CAS# 63148-58-3]



PPM-500 Phenylmethyl Silicone provides long-term stability at 250°C (open system). PPM-500 Phenyl Silicone (Phenylmethylsiloxane) is a clear, 100% Phenylmethyl siloxane Fluid [CAS# 63148-58-3] (also shown as CAS #9005-12-3) with a viscosity of 500cSt @ 25°C.

PPM-500 Phenyl Silicone Fluid is the highest phenyl content silicone fluid in our line, 100% phenylmethyl content. Due to the high phenyl content, it possesses the highest thermal stability in both open and closed systems. PPM-500 is characterized by its higher oxidation resistance, high thermal stability, high dielectric strength, and high damping action (meets VV-D-1078 "Silicone as damping fluid).

In open systems (presence of air), PPM-500 has a long-term service temperature range of  $250^{\circ}$ C (1,500 to 2,000 hours). In closed systems (absence of air), it will remain stable at 300°C. (See below for gel times).

With the presence of phenyl groups, the Refractive index is also much higher: 1.533. This enables it to match the refractive index of optical fibers and amorphous silica allowing "invisible" connections and transparent blends.

<u>Applications include</u>: High-Temp Damping Fluid –High Temperature Bath Fluid for Laboratory and Research apparatus –Hydraulic Fluid – High Dielectric Strength Fluid – High Temperature Heat Transfer Fluid.

#### Features

- High Thermal Resistance
- Stability at 250°C (open system)
- Stability at 315°C (closed system)
- Excellent Lubrication
- Non-Flammable
- High Refractive Index
- High Oxidation Resistance
- High Shear Resistance
- High Resistance to Oxidation
- Excellent Low Temp Stability
- Improved metal-to-metal lubricity
- Low Compressibility

#### Specifications

Chemical Name	Poly Phenylmethylsiloxane
CAS #	63148-58-3>98%
Appearance	Clear, odorless fluid
Non-Flammable	Yes
Thermal Stability	Excellent

### Packaging

1-gallon4kg
5-gallon pail20kg
F.O.B. Phila, PA U.S.A.

#### **Typical Product Data**

Viscosity	Viscosity/	Pour Point	Gel Time, hours	Specific	Refractive	Surface	Dielectric	Flashpoint	Ignition Temp
@ 25°C	Temp Coefficient	°C	250°C in Air	Gravity	Index	Tension	Constant	(COC)	°C
500cSt	0.88	-20°C	1,500 to 2,000 hrs	1.11	1.533	28.5	2.95	300°C	487°C

Molecular Weight
2,500 - 2,700

## For More Information, Contact:

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