



### Pure Silicone Fluid 100cSt Medium Temperature Bath Fluid

Operating Temperature Range: -40°C to 170°C (open system) / -40C to 230°C (closed system)



Pure Silicone Fluid 100cSt Bath Fluid offers high thermal stability for open/closed system baths and heat transfer applications... it is our standard recommended bath fluid

**Pure Silicone Fluid 100cSt Medium Temperature Bath Fluid** is a clear, colorless and odorless linear Polydimethylsiloxane (CAS # 63148-62-9) Characterized by its high flash point, high service temperature range, low vapor pressure and high resistance to oxidation, PSF-100cSt is our recommended fluid for open/closed system baths and heat transfer applications that require a fluid with a wide service temperature range.

In **open system** baths, PSF-100cSt Medium Temperature Silicone Bath Fluid has an **operating temperature range of -40°C to 170°C**. At 150°C, PSF-100cSt will remain stable for approximately 1-year. In **closed system\***, the operating temperature range is wider due to the absence of air. The **closed system operating range is -40°C to 230°C**.

PSF-100cSt has a low viscosity-temperature coefficient or V.T.C. (viscosity @99°C ÷viscosity @ 38°C). Thus, it will not exhibit a wide viscosity increase at the lower temperatures. For example, at -20°C, its viscosity increases to 300cSt while at 150C, it lowers to 15cSt. This is critical for baths that have pumping systems that cannot operate with higher viscosity fluids.

Bath Applications include: open system baths, closed system baths, constant temperature baths, circulating baths, low temperature refrigerated baths, closed loop baths, heat transfer baths

\*Closed system baths are systems from which air has been excluded

#### Viscosity/Temp Specs.

Viscosity-Temperature Coefficient.....0.60

Viscosity @ temperature  
 @ 15°C.....17cSt  
 @100°C.....30cSt  
 @ 25°C.....100cSt  
 @0°C.....160cSt  
 @ -20°C.....300cSt

#### Features

- 100% silicone fluid...clear, colorless & odorless
- Viscosity: 100cSt @ 25°C
- Non-Flammable
- High Thermal Stability
- Wide service temperature range
- Hydrophobic – insoluble with water
- Compatible with virtually all o-rings, gaskets, hoses, valves and seals\*
- Clear, Colorless, Odorless
- Low V.T.C – 0.60
- Low Vapor pressure
- Low Pour Point: -55°C
- Flash Point: 315°C
- High Resistance to Oxidation

#### Gel time of Pure Silicone Fluid 100cSt @ Temperature (open system)

149°C	204°C	250°C	260°C	300°C
Approx 1-year	250 to 300 hours	40 to 60 hours	20 to 25 hours	<24 hours

#### Typical Product Data

Specific Gravity	Refractive Index	Pour Point	Flash Point	Surface Tension Dynes cm @ 25°C	Thermal Conductivity @ 25°C g/cal/cm/sec °C	Coeff of Thermal Expansion Cc/cc/C, 0 -150°C	Maximum Volatile content @ 150°C, wt loss, 24 hrs	Specific Heat @ 25°C
0.960	1.4025	-55°C	315°C	209	0.00036	0.00093	0.5%	0.360

#### Packaging

1-gallon.....3.6kg  
 5-gallon pail.....18kg  
 55-gallon drum.....200kg

#### For More Information, Contact:

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