



## PSF-1.5cSt Pure Silicone Fluid

### Super Low-Viscosity Silicone Fluid: Decamethyltetrasiloxane (CAS # 141-62-8)



Pure Silicone Fluid 1.5cSt has a viscosity similar to water.

**Pure Silicone Fluid 1.5cSt** is a super low-viscosity (1.5cSt @ 25°C) Polydimethylsiloxane that is composed of Decamethyltetrasiloxane (CAS#141-62-8). The fluid is clear, colorless and odorless.

**PSF-1.5cSt** is characterized by its low viscosity (close to water), , high compressibility, low surface tension (spreadability), excellent low temperature stability (pour point – 90°C), low viscosity change at extremely low temperatures and excellent lubricity. Due to its low temp stability, it is widely used as a low temperature bath fluid and low temperature heat transfer fluid.

**PSF-1.5cSt (Dimethicone**) is also used in a number of Personal Care products due to its excellent spreading and unique volatility characteristics. It features good solubility in anhydrous alcohols and in a wide variety of solvents. In addition, it leaves no residue or build-up, has a transient effect, and a non-greasy feel.

Applications include: heat transfer fluid, low temperature bath fluid, dielectric fluid, low viscosity damping fluid, lubricant and base fluid in personal care products

#### **Specifications**

Product Code	PSF-1.5cSt
Chemical family	Polydimethylsiloxane
Chemical name	Decamethyltetrasiloxane
CAS No.	141-62-8
INCI Name	Dimethicone
Appearance	Clear, colorless & odorless fluid
Pour Point	-100°C
Minimum Order	1-gallon (3.785 liters)

#### **Features**

- Super low viscosity
- Excellent Lubrication
- Pour Point: 100°C
- Excellent Low Temperature Serviceability
- Low viscosity change at low temperatures
- Fast evaporation rate
- High Compressibility
- High Oxidation Resistance
- Low Surface Tension: high spreadability
- VOC Exempt/ HAP Free
- RoHS Compliant

#### **Typical Product Data**

Specific Gravity	Refractive Index	Pour Point	Flash Point closed cup	Boiling Point @ 760mm	Surface Tension dynes /cm @ 25°C	Vapor Pressure@ 25°C	Volatile content @ 150°C (open)	Molecular weight
0.851	1.3874	-100°C	57°C	194°C	18.0	1mmHg	100%	340

#### **Thermal Properties**

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Thermal	Coeff. of Thermal	Specific Heat	
Conductivity @ 50°C g cal/cm•sec• °C	Expansion cc/cc °C	cal/g/°C	
0.00025	0.00134	0.410	

<sup>\*</sup> Thermal conductivity: 0.10 W/m °C

#### **Packaging**

1-gallon (3.785 liters)	3.2kg net wt.		
5-gallon pail (18.9 liters)	16kg net wt.		
55-gallon drum	170kg net wt.		
F.O.B. Phila, PA U.S.A.A.			

#### **Dielectric Properties**

Dielectric Strength	Dielectric Constant (50Hz) @ 25C	Dielectric Constant (100Hz) @ 25C	Dissipation Factor (100Hz) @ 25C
350 volts/mil	2.39	2.36	0.0004

#### **CAS Information**

Identity	CAS #	%	
Decamethyltetrasiloxane	141-62-8	100	

# For More Information, Contact: Clearco Products Co., Inc.

3430 G. Progress Drive Bensalem, PA 19020 U.S.A.

Tel: 215 639-2640 Fax: 215 639-2919

Email: <a href="mailto:info@clearcoproducts.com">info@clearcoproducts.com</a>
Web: <a href="mailto:www.clearcoproducts.com">www.clearcoproducts.com</a>

<sup>\*</sup> Specific Heat: 1.8 J/g