



Low Temperature Silicone Heat Transfer Fluids Matrix

Properties					
Property	PSF-1.5cSt	PSF-2cSt	PSF-5cSt	PSF-10cSt	PSF-20cSt
Chemical family	Polydimethylsiloxane	Polydimethylsiloxane	Polydimethylsiloxane	Polydimethylsiloxane	Polydimethylsiloxane
Chemical name	Polydimethylsiloxane	Polydimethylsiloxane	Polydimethylsiloxane	Polydimethylsiloxane	Polydimethylsiloxane
CAS #	63148-62-9	63148-62-9	63148-62-9	63148-62-9	63148-62-9
Appearance	clear, colorless	clear, colorless	clear, colorless	clear, colorless	clear, colorless
Odorless	Yes	Yes	Yes	Yes	Yes
Hydrophobic	Yes	Yes	Yes	Yes	Yes
Viscosity @ 25°C	1.5cSt	2cSt	5cSt	10cSt	20cSt
V.T.C.	0.46	0.48	0.54	0.56	0.59
Soluble in water	No	No	No	No	No
Pour point	-100°C	-100°C	-100°C	-70°C	-65°C
Flash point	57°C	75°C	135°C	211°C	232°C
Boiling point	194°C	229°C	>200°C	>200°C	>232°C
Vapor pressure @ 25°C	1mmHg	1mmHg	<1mmHg	<1mmHg	<1mmHg
Specific heat @ 25°C J/g °C	2.0	1.8	1.8	1.7	1.6
Thermal conductivity @ 25C W/m °C	0.10	0.11	0.12	0.14	0.15
Thermal conductivity @ 50°C g cal/cm · sec · °C	0.00025	0.00026	0.00028	0.00032	0.00034
Coefficient of Thermal expansion cc/cc/°C	0.00134	0.00117	0.00109	0.00108	0.00107
Open system Service temperature	Closed system only	Closed system only	-70°C to 65°C	-60°C to 100°C	-50°C to 120°C
Closed system Service temperature	-80°C to 150°C	-80°C to 150°C	-70°C to 150°C	-60°C to 200°C	-50°C to 220°C
Volume resistivity TΩ m	≥1	≥1	≥1	≥1	≥1
Dielectric breakdown strength 2.5mm kV	≥35	≥35	≥35	≥35	≥35
Dielectric Constant 50Hz	2.38	2.42	2.60	2.65	2.70
Dielectric loss tangent 50Hz	≤0.0001	≤0.0001	≤0.0001	≤0.0001	≤0.0001

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