

Technical Data Sheet

RawSil HT-50

Polydimethylsiloxane Heat Transfer Fluid

RawSil HT-50 is a polydimethylsiloxane (PDMS) heat transfer fluid. This meets requirements of electrical specifications & provides optimum combination of heat transfer properties. It has excellent dielectric, thermal and chemical properties. This performs as a cooling and heat transfer fluid for transformers and other electrical equipment.

Chemical Structure: Polydimethylsiloxane (PDMS)

FEATURES

- Meets the requirements of both IEC836 and ASTM D 4652-92
- Essentially non-toxic
- Non-halogenated
- Environmentally safe
- Compatible with a wide range of solid electrical insulating materials
- Contains no additives
- Classified as non-hazardous
- High thermal stability and oxidation resistance
- Higher fire point and lower heat release rate than other types of class K insulating liquids
- Good electrical properties and operating capabilities over a wide temperature range

TYPICAL PROPERTIES¹

Parameter	Unit	Value
Appearance		Crystal Clear Liquid
Density at 25°C	g/cm ³	0.96
Viscosity at 25°C	cps	50
Water Content	ppm	< 50
Specific heat	kJ/Kg.K	1.51
Thermal conductivity	W/(m.K)	0.151
Refractive Index at 25°C		1.404
Breakdown voltage	kV	50
Permittivity at 25°C		2.5
Dissipation factor at 25°C		0.0001
Volume Resistivity at 25°C	Ohm.cm	1.0 x 10 ¹⁴
Flash Point open cup	°C	>285
Fire Point open cup	°C	370



¹Typical Values – Not to be considered as specifications.

SHELF LIFE

36 months from date of manufacture in the original container when stored above 0°C and below 32°C. Do not store above 38°C.

PACKING

200 kg epoxy coated drums and 950 kg in HDPE totes. 50kg HDPE carboys are available on request.

STORAGE & HANDLING

It is recommended that normal safety precautions (hand gloves & safety goggles) be taken while handling the product. The material should be stored in original RawSource containers in a cool place and kept protected from direct exposure to sunlight.

LIMITATIONS

This product is not represented as suitable for medical or pharmaceutical usage. It is not recommended for human ingestion or for food use.

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