

**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 PROPERTIES<sup>1</sup>**

Parameter	Unit	Value
Appearance		Crystal Clear Liquid
Density at 25°C	g/cm <sup>3</sup>	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 <sup>14</sup>
Flash Point open cup	°C	>285
Fire Point open cup	°C	370



*<sup>1</sup>Typical 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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