



Technical Data Sheet

Product

name Silicon Oil IT 50

1. Product Description

A polydimethylsiloxane dielectric fluid specially meeting IEC 836 and ASTM D 4652-92 standards, qualified to be used in electric transformers.

2. Key Properties

- Compatible with a wide range of solid electrical insulating materials
- Nontoxic, classified as non-hazardous
- Chemically inert, non-halogenated, environmentally safe
- Contains no additives
- High thermal stability and oxidation resistance
- Non propagation of fire

3. Benefits

- Excellent dielectric properties and operating capabilities over a wide temperature range
- Excellent thermal stability (designed to operate at both high and low temperatures)
- Good heat transfer properties

4. Applications

As a cooling and insulating liquid for transformers and other electrical equipment

5. Typical Properties (not for sales specifications)

Properties	Units	Values
Appearance		Clear liquid
Density at 25°C	kg/m ³	960
Viscosity	mm ² /s	50
Flash Point	°C	>300
Fire Point	°C	>370
Pour Point	°C	<-50
Refractive Index at 25°C		1.404
Water Content	ppm	30
Breakdown Voltage	kV	50
Dissipation Factor at 25°C-50Hz		10 ⁻³

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Properties	Units	Values
Permittivity at 25°C-50Hz		2.55
Volume Resistivity at 25°C	Ohm.cm	1.0x10 ¹⁴
Thermal Conductivity	W/(mK)	0.151
Specific Heat	kJ/kg.K	1.51

6. Handling

This document does not contain safety precautions. Before handling this material, please read the Material Safety Data Sheet, check the label on the container, and conform to the safety, physical and hazard guidelines and precautions.

7. Storage and Shelf Life

This product should be stored in its original unopened containers at a temperature above 0°C and below 35°C. It can be used within the 36 months following its production date.

8. Packaging

Available in 1.000 kg IBC, 200 kg Drums and 25 kg Pails.

9. Restrictions

This ingredient is solely proposed in technical applications, It is not suitable to be used in medical, human injection or pharmaceutical applications.

10. Limited Warranty PLEASE READ CAREFULLY

- The information herein is offered in good faith. It is believed to be accurate at the time of shipment.
- It should not be used as a substitute for the customer's test, the customer bears the responsibility to ensure that the product matches the intended application is safe and achieves the desired benefits.
- The product warranty is limited to the refund value of the purchase or the replacement only when it is demonstrated that the product is out of the agreed sales specifications.