

SG500 Silicone Grease

Description

This is a highly thermally conductive silicone grease / compound. This property together with a low moisture and metallic impurity content makes it a suitable heat sink product for a wide variety of applications within the electronics and electrical industries.

Key Features

- Thermally conductive
- Low volatility
- Good dielectric and isolating properties
- Low bleed even at elevated temperatures

Application

Thermally Conductive

Use and Cure Information

Typical Applications

This grease has a relatively soft consistency and high extrusion rate that facilitates application by syringe into small gaps. This allows it to be used when mounting semi-conductor devices on heat sinks, obviating air gaps between imperfectly mating surfaces. In this application, it may be used in conjunction with electrically insulating mica washers without increasing electrical leakage in any way.

Used within a semi-conductor device casing it affords excellent shock protection for diode elements and provides protection against inadvertent contamination of these elements before the devices are finally encapsulated

How to Use

Minor surface cracking of the grease on long term storage is not a defect, but typical of this type of product. This effect disappears as soon as the surface is disturbed. If syringes are to be filled for injection of the product, care should be taken to avoid entrapment of air. All equipment used to handle the product can be cleaned readily with white spirit or other hydrocarbon solvents.

Health & Safety

Health and Safety

Safety Data Sheets available on request.

Packaging

CHT Greases are available in a variety packaging including bulk containers. Please contact our sales department for more information.

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Revision No 2
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Property

Product

| | | |
|-------------------------|-------------|------------------------|
| Bleed % | | 0.2 % |
| Color | | White |
| Density | BS ISO 2781 | 2.30 g/cm ³ |
| Max Storage Temperature | | 40 °C / 104 °F |
| Max Working Temp | | 150 °C / 302 °F |
| Min Working Temp | | -50 °C / -58 °F |
| Rheology | | Paste |
| Silicone Yes/No | | Yes |
| Thermal Conductivity | | 0.77 W/mK |
| Weight Loss % | | 0.2 % |

Uncured Product

| | | |
|-----------|------------|--------------|
| Viscosity | Brookfield | 240000 mPa.s |
|-----------|------------|--------------|

Electrical Properties

| | | |
|------------------------------|------------|-------------------------|
| Dielectric Constant | ASTM D-150 | 4.3 |
| Dielectric Strength (V/mil) | | 277 V/mil |
| Dielectric Strength kV/mm | ASTM D-149 | 10.92 kV/mm / 277 V/mil |
| Dissipation Factor | ASTM D-150 | 0.003 |
| Volume Resistivity (Ohms cm) | ASTM D-257 | 1.1E+15 ohms cm |

Storage

| | | |
|------------|--|---------|
| Shelf Life | | 24 mths |
|------------|--|---------|

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