

## 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

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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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### Property

#### Product

Bleed %		0.2 %
Color		White
Density	BS ISO 2781	2.30 g/cm <sup>3</sup>
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
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#### 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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