

## 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.

Revision Date 26 Oct 2021  
Revision No 2  
Download Date 18 May 2024

### 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
-----------	------------	--------------

#### 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
------------	--	---------

The content set out in the technical data sheet does not contain information upon which you should rely. It is provided for general information purposes only and does not constitute a product specification. You must obtain professional or specialist advice before taking any action based on the information provided in the technical data sheet. CHT make reasonable efforts to ensure that information set out in the technical data sheet is complete, accurate, and up-to-date. CHT do not, however, make any representations, warranties or guarantees (whether express or implied) that information set out in the technical data sheet is complete, accurate, or up-to-date or that the product will be suitable for your requirements. You should carry out your own testing to determine the applicability of such information and whether the product will be suitable. CHT reserve the right to modify the technical data sheet at any time. The CHT technical service department is available to offer further information and advice and should it be needed to look at modifying current products or custom formulate a new one to meet your specific requirements. Please contact the technical service department.

**CHT Germany GmbH:** Postfach 12 80, 72002 Tübingen, Bismarckstraße 102, 72072 Tübingen, Germany  
Telephone: 07071/154-0, Fax: 07071/154-290, Email: info@cht.com, Homepage: www.cht.com / www.cht-silicones.com