

SG500

Characterisation

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.

Technische Daten

SG500			
Property at 23°C +/- 2°C			
Appearance	White paste		
Colour	White		
Bleed	0.2	%	
Rheology	Paste		
SG	2.3		BS ISO 2781
Silicone Yes/No	Yes		
Water potable	No		
Weight loss	0.2	%	
Working temp.	-50 - 150	°C	
Electrical properties			
Thermal conductivity	0.77	W/m*K	
Dielectric constant at 1 kHz	4.3		ASTM D-150
Dielectric strength	10.92	kV/mm	ASTM D-149
Dissipation factor at 1 kHz	0.003		ASTM D-150
Volume resistivity	1.1 E + 15	Ohm*cm	ASTM D-257

The above given values are product describing data. Please consult the 'delivery specification' for binding product specifications. Further data about product properties, toxicological, ecological data as well as data relevant to safety can be found in the safety data sheet.

Storability / Storage

With a proper storage the product will hold for approx. 24 months if stored properly below 40°C and protected from frost in a dry place in closed original containers.

Properties

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

Application Technique

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 matching 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.

It is absolutely important to check the compatibility in preliminary tests if unknown substrates are used.

Safety

Please observe our EC safety data sheets and the safety remarks on our container labels when handling our products. The dangerous goods regulations and the accident prevention regulations of the professional associations must be particularly observed. Keep the EC safety data sheet of the applied product at hand since it provides you with useful instructions for the safe use and disposal of the product as well as for actions to be taken in case of accidents.

We reserve the right to modify the product and technical leaflet.

Our department for applied technique is always at your service for further information and advice.

Our technical advice and recommendations given verbally, in writing or by trials are believed to be correct. They are neither binding with regard to possible rights of third parties nor do they exempt you from your task of examining the suitability of our products for the intended use. We cannot accept any responsibility for application and processing methods which are beyond our control.

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