## **TECHNICAL DATA SHEET**



Value

3.8E+14 ohms cm

30 °C / 86 °F

**Test Method** 

ASTM D-257

# SilSo Cool 21311 2-part thermally conductive encapsulant

**Property** 

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This is a two-component, 100% silicone solids, thermally conductive elastomer designed for electronic potting and roller	Uncured Product Appearance		Viscous liquid
applications.	Color A		Off white
Key Features	Color B		Gray
<ul><li>Flame retardant</li><li>High thermal conductivity</li></ul>	Density A	BS ISO 2781	2.82
Low viscosity	Density B	BS ISO 2781	2.82
Electrically insulating	Mix Ratio By Weight		1:1
Application	Pot Life mins at 23°C/73°F		>50 mins
TIM automotive, EV and electronics potting	Self Bonding		No
Use and Cure Information	Viscosity A	Brookfield	23900 cP
IMPORTANT:	Viscosity B	Brookfield	22000 cP
The 'A' part of the product contains the platinum catalyst, great care should be taken when using automatic dispensing	Viscosity Mixed	Brookfield	23000 сР
equipment. Please ensure that it is not contaminated by residual	Cured Product		
hydride containing rubber in the dispensing equipment, as curing	24 hours at 23+/-2°C		
will result. If in doubt, it's advised to thoroughly purge the equipment with a suitable hydrocarbon solvent or silicone fluid.	Color		Gray
Mixing	Hardness Shore A	ASTM D 2240-95	45
Both the 'A' and 'B' parts should be well stirred to ensure the	Max Working Temp		200 °C / 392 °F
material is uniform and any settled the fillers have been remixed.	Min Working Temp		-50 °C / -58 °F
In order to achieve optimum performance, the same "A" and "B"	Thermal Conductivity		2.3 W/mK

automatic dispensing with static mixing head, the two components should be degassed before processing.

Recommended vacuum conditions are 30-50 mbar intermittently over 5-10 minutes. Cast the mixture either by gravity or pressure injection.

Storage

**Electrical Properties** 

Volume Resistivity (Ohms

Max Storage Temperature

#### **Inhibition of Cure**

side lot number should be used.

Place the required amount of 'A' and 'B' parts by weight at the mix ratio shown opposite, in a clean plastic or metal container of

approximately 3 times their volume, and mix until the color of the mixture is uniform. For best results, we recommend degassing. Degas by intermittent evacuation, the larger volume of the mixing

vessel helps prevent overflow during this operation. In the case of

Description

Great care must be taken when handling and mixing all addition cured silicone elastomer systems, ensuring that all the mixing tools (vessels and spatulas) are clean and constructed in materials which do not interfere with the curing mechanism. The cure of the rubber can be inhibited by the presence of compounds of nitrogen, sulphur, phosphorus and arsenic; organotin catalysts and PVC stabilizers; epoxy resin catalysts and even contact with materials containing certain of these substances e.g. molding clays, sulphur vulcanized rubbers, condensation cure silicone rubbers, onion and garlic.

### **Curing Conditions**

The data offers a guide to the rate of cure at various temperatures, mixing of the components at temperatures between 15 and 25°C is recommended to ensure adequate pot life for degassing and handling. The pot life can be extended to several hours by chilling the components before mixing.

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

## **Health & Safety**

Safety Data Sheets available on request.

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