# TECHNICAL DATA SHEET



Value

# **SE2010** 2 part gap filler

Description This is a two part, thermally conductive, thixotropic material, which cures at room temperature or can be accelerated with heat. It is specifically formulated to give low hardness and resistance to slump and features low and high temperature mechanical and chemical stability. It remains flexible and has a natural low level tack, ideal for applications where a strong mechanical or chemical bond is not required. It has a controlled volatile content and an easy mix ratio by volume or weight.

#### **Key Features**

- Thermally conductive
- UL94 V0 listed in file No. E334038
- Controlled volatile content
- Non slumping

Gap filler as a removable thermal interface between heat sink and heat source, micro processors and automotive electronics

### **Use and Cure Information**

#### IMPORTANT:

The 'A' part of product

contains the platinum catalyst; great care should be taken when using automatic dispensing equipment. Please ensure that it is not contaminated by residual hydride containing rubber in the dispensing equipment, as curing will result. If in doubt, it's advised to thoroughly purge the equipment with a suitable hydrocarbon solvent or silicone fluid.

This gap filler can be supplied in bulk containers for use with automatic mixing equipment or in a twin cartridge system and static mixer to provide for easy application and mixing.

#### **Inhibition of Cure**

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. moulding clays, sulphur vulcanised 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**

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Safety Data Sheets available on request.

#### **Packaging**

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

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Download Date 16 Jul 2024 **Property Uncured Product** Color A Pale grey Color B Black Cure Type Addition De-mould Time / Full Cure at 5 hr hrs 23°C/73°F Density A BS ISO 2781 2.3 Density B BS ISO 2781 2.3 Max Cure Mins @ 100 °C 2 mins Mix Ratio By Weight Pot Life mins at 23°C/73°F 60 min mins Rheology **Paste** 248000 cP Viscosity A **Brookfield** Brookfield 390000 cP Viscosity B Viscosity Mixed **Brookfield** 320000 cP

**Test Method** 

#### **Cured Product**

CTE Volumetric ppm/°C		558 ppm/°C
Color		Black
Density	BS ISO 2781	2.3 g/cm3
Hardness Shore 00	ASTM D 2240-95	50
Linear Coefficient of Thermal Expansion (ppm/°C)		186 ppm/°C

Expansion (ppm/°C) Linear Shrinkage (%) 0.1 % 200 °C / 392 °F Max Working Temp -60 °C / -76 °F Min Working Temp 1.7 W/mK

Thermal Conductivity UL 94V-0 Yes UL File No. E334038

# **Electrical Properties**

Dielectric Constant ASTM D-150 4.9 Dissipation Factor ASTM D-150 0.006

Volume Resistivity (Ohms ASTM D-257 9.26E+12 ohms cm cm)

# Storage

Max Storage Temperature 25 °C / 77 °F Shelf Life 6 mths

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