## **TECHNICAL DATA SHEET**



# AS1723 1 Part Non-Corrosive Neutral Cure Adhesive Sealant and Potting Material (Electronic Grade)

#### Description

This is a non-corrosive, neutral cure, 1-part, RTV (Room Temperature Vulcanising) silicone adhesive sealant. It is one in a range of Alkoxy cure products which are solvent free. It exhibits excellent primerless adhesion to many substrates and cures at room temperature when in contact with atmospheric moisture to form a tough rubber. This product will not corrode copper or its alloys and is suitable for use with electronic components.

#### **Key Features**

- Self levelling
- Low odour
- Non corrosive
- Suitable for sensitive substrates

#### **Application**

Suitable for sensitive substrates

#### **Use and Cure Information**

This product is a ready for use 1 Part system. If supplied in cartridges it can be applied using either manual or pneumatic dispensing guns. It can also be applied from bulk containers using conventional drum dispensing equipment.

All surfaces to which the sealant is to be applied should be clean, dry and free from grease, dirt, and loose material. Priming of surfaces is not normally required. If using as an adhesive, it should be applied to one clean surface and the other clean surface brought into contact with it within the tack free time stated opposite. For optimum bond strength, the thickness of the sealant joint should be a minimum of 1 mm.

The sealant will cure upon exposure to atmospheric moisture, ideally between 20 to 30 °C and 40% to 70% Relative Humidity. Time taken for cure will depend on the thickness of the joint, humidity and temperature. Joints should be left undisturbed for at least 24 hours, but preferably longer to effect sufficient depth of cure. Full cure requires 7 days.

"For pneumatic dispensing of 310 ml cartridges, the recommended pressure is 2.25 to 3.45 bar (40 to 50 psi). Dispensing pressure above the recommended limits may lead to gas bypassing the piston, causing spluttering at the nozzle and poor bead quality"

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

### **Health & Safety**

#### **Health and Safety**

Safety Data Sheets available on request.

#### **Packaging**

CHT Adhesives are available in a variety packaging including cartridges and bulk containers. Please contact our sales department for more information.

Revision Date 11 Jun 2021

Revision No 2

Download Date 25 Apr 2024

Property Test Method Value

**Uncured Product** 

Appearance Viscous liquid

Cure Profile 23+/-2°C and 50+/-5%

humidity

Cure Through to 3 mm Depth
Cure Type
Alkoxy
Rheology
Self Level
Yes

Tack Free Time / Skin Formation at 23°C/73°F

Viscosity Mixed Brookfield **72000 cP** 

**Cured Product** 

7 days at 23+/-2°C and 50+/-5% humidity

 100% Modulus (N/mm2)
 0.43 MPa / 62 psi

 Color
 Translucent

 Density
 BS ISO 2781
 1.03 g/cm3

 Elongation at Break
 ISO 37
 216 %

Hardness Shore A ASTM D 2240-95 28

Linear Coefficient of Thermal Expansion (ppm/°C)

Max Working Temp

Min Working Temp

Tensile Strength

295 ppm/°C

200 °C / 392 °F

50 °C / -58 °F

1 N/mm2 / 145 psi

Thermal Conductivity

Volume Coefficient of

Thermal Conductivity

884 ppm/°C

Thermal Expansion (ppm/°C)

Youngs Modulus (N/mm2) 0.3 N/mm2 / 44 psi

**Electrical Properties** 

Dielectric Constant ASTM D-150 2.72

Dielectric Strength (V/mil) >457 V/mil

Dielectric Strength kV/mm ASTM D-149 >18 kV/mm / 0 V/mil

Dissipation Factor ASTM D-150 0.0011

Volume Resistivity (Ohms cm) ASTM D-257 **4.71E+15 ohms cm** 

Storage

Max Storage Temperature 40 °C / 104 °F Shelf Life 12 mths

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