TECHNICAL DATA SHEET



AS1707 1 Part Non-Corrosive Neutral Cure Adhesive Sealant (Electronic Grade)

Desc		

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

- Thermally conductive
- · Non corrosive for sensitive substrates
- Low thermal outgassing (ECSS-Q-ST-70-02C)
- UL94 V0 recognised in file No. E334038

Application

Electronic assemblies, aerospace and automotive

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 $^{\circ}$ 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 21 Feb 2022

Revision No 4

Download Date 13 Dec 2022

Property Test Method Value

Uncured Product

Cure Profile 23+/-2°C and 50+/-5%

10 min

Cure Trome humidity
Cure Through to 3 mm Depth 48 hr
Cure Type Alkoxy
Rheology Paste
Self Bonding Yes
Tack Free Time / Skin

Cured Product

Formation at 23°C/73°F

CVCM 0.03 %
Color Grey

Density BS ISO 2781 **2.95 g/cm3**

Elongation at Break ISO 37 11 %
Hardness Shore A ASTM D 2240-95 84

Max Working Temp $230 \ ^{\circ}\text{C} \ / \ 446 \ ^{\circ}\text{F}$ Min Working Temp $-65 \ ^{\circ}\text{C} \ / \ -85 \ ^{\circ}\text{F}$

TML 0.09 %

Tensile Strength ISO 37 1.82 N/mm2 / 264 psi

Thermal Conductivity 3.27 W/mK

 Thermal Outgassing ECSS-Q-ST-70-02C
 Yes

 UL 94V-0
 Yes

 UL File No.
 E334038

 UL Listed
 Yes

Electrical Properties

Volume Resistivity (Ohms ASTM D-257 1.26E+14 ohms cm

cm)

Storage

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