TECHNICAL DATA SHEET



AS1620 1 Part Low Corrosive Industrial Sealant

Description

This is a 1-part, RTV (Room Temperature Vulcanising) silicone adhesive sealant. It is one in a range of Oxime cure products which are solvent free. It exhibits good primerless adhesion to many substrates especially plastics and cures rapidly at room temperature when in contact with atmospheric moisture. This product can be described as low corrosive but would not be recommended for use with copper or its associated alloys.

Key Features

- Excellent flow and self levelling properties
- Low corrosion
- Good adhesion to substrates

Application

Applications include but are not limited to, screen printed gaskets automotive, LED SMT Mega screens, coating of the reverse side of the PCB

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"

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 30 Nov 2023

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Download Date 26 Apr 2024

Test Method Value **Property**

Uncured Product

Appearance Viscous liquid

23+/-2°C and 50+/-5% Cure Profile

humidity Cure Through to 3 mm Depth <24 hr

Cure Type Oxime Rheology **Flowable** Tack Free Time / Skin

14 min Formation at 23°C/73°F Viscosity Mixed 26000 cP **Brookfield**

Cured Product

Hardness Shore A

7 days at 23+/-2°C and 60+/-5% humidity

100% Modulus (N/mm2) 0.36 MPa / 52 psi Color **Translucent** Density BS ISO 2781 1.04 g/cm3 Elongation at Break **ISO 37** 400 % ASTM D 25

2240-95

Linear Coefficient of Thermal 291 ppm/°C

Expansion (ppm/°C) Linear Shrinkage (%) 1 %

220 °C / 428 °F Max Working Temp

Min Working Temp -50 °C / -58 °F Tear Resistance (N/mm) BS ISO 34-1 3.3 N/mm / 19 ppi Tensile Strength **ISO 37** 2 N/mm2 / 290 psi

0.2 W/mK Thermal Conductivity Volume Coefficient of

872 ppm/°C Thermal Expansion (ppm/°C)

Youngs Modulus (N/mm2) 0.56 N/mm2 / 81 psi

Electrical Properties

Dielectric Constant ASTM D-150 2.6

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

Dissipation Factor ASTM D-150 0.001

Volume Resistivity (Ohms ASTM D-257 4.9E+15 ohms cm cm)

Storage

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