TECHNICAL DATA SHEET

SilSo Bond 13603
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

- Thixotropic paste
- Low corrosive
- Primerless adhesion to many substrates
- Low odour

Application

Suitable for but not limited to aviation and aerospace applications

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 ºC 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	08 Mar 2024
Revision No	3
Download Date	19 Jul 2024

Property	Test Method	Value
Uncured Product		
Appearance		**Thixotropic paste**
Cure Profile		**23+/-2°C and 50+/-5% humidity**
Cure Through to 3 mm Depth		**12 hr**
Cure Type		**Oxime**
Extrusion Rate g/min		**390 g/min**
Rheology		**Paste**
Self Bonding		**Yes**
Tack Free Time / Skin Formation at 23°C/73°F		**5 min**
Cured Product		
7 days at 23+/-2°C and 50+/-5% humidity		
100% Modulus (N/mm2)		**0.8 MPa / 116 psi**
Color		**Translucent**
Density	BS ISO 2781	**1.07 g/cm3**
Elongation at Break	ISO 37	**300 %**
Hardness Shore A	ASTM D 2240-95	**33**
Linear Coefficient of Thermal Expansion (ppm/°C)		**295 ppm/°C**
Linear Shrinkage (%)		**0.8 %**
Max Working Temp		**220 °C / 428 °F**
Min Working Temp		**-50 °C / -58 °F**
Tear Resistance (N/mm)	BS ISO 34-1	**4.8 N/mm / 27 ppi**
Tensile Strength	ISO 37	**2.15 N/mm2 / 312 psi**
Thermal Conductivity		**0.2 W/mK**
Volume Coefficient of Thermal Expansion (ppm/°C)		**888 ppm/°C**
Youngs Modulus (N/mm2)		**0.6 N/mm2 / 87 psi**
Electrical Properties		
Dielectric Constant	ASTM D-150	**3**
Dielectric Strength (V/mil)		**457 V/mil**
Dielectric Strength kV/mm	ASTM D-149	**32 kV/mm / 813 V/mil**
Dissipation Factor	ASTM D-150	**0.0025**
Volume Resistivity (Ohms cm)	ASTM D-257	**8.7E+15 ohms cm**
Adhesion Testing		
Lap Shear Aluminium kg/cm²	ASTM D1002	**4.15 kg/cm²**
Lap Shear Stainless Steel 304 kg/cm²	ASTM D1002	**3.52 kg/cm²**
Storage		
Max Storage Temperature		**40 °C / 104 °F**
Shelf Life		**12 mths**

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