# **TECHNICAL DATA SHEET**



# AS1604 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**

- Resistant to fuels
- Low corrosive
- Good adhesion to many substrates

#### **Application**

Applications include but are not limited to, petrol or diesel contact, white goods, oven glass sealing and hob sealing.

#### **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.

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Property Test Value Method

**Uncured Product** 

Cure Profile 23+/-2°C and 50+/5% humidity

Cure Through to 3 mm
Depth
Cure Type
Rheology
Self Bonding

C12 hr
Oxime
Paste
Yes

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

3 min

## **Cured Product**

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

100% Modulus (N/mm2)
Color

Density

BS ISO 2781

Elongation at Break

1.15 MPa / 167 psi Matt Black

1.4 g/cm3

250 %

Hardness Shore A ASTM D 2240-95 **50** 

Linear Coefficient of Thermal Expansion 279 ppm/°C

(ppm/°C)
Linear Shrinkage (%)

0.8 %

Max Working Temp

240 °C / 464 °F

Min Working Temp

-50 °C / -58 °F

Tear Resistance (N/mm)  $\begin{array}{ccc} BS & ISO & 34- \\ 1 & & \end{array}$  **7 N/mm / 40 ppi** 

Tensile Strength ISO 40 2 N/mm2 / 290 psi

Thermal Conductivity

Volume Coefficient of
Thermal Expansion

0.3 W/mK

837 ppm/°C

pm/°C)

Youngs Modulus (N/mm2) 0.5 N/mm2 / 73 psi

**Electrical Properties** 

Dielectric Constant ASTM D-150 **3** 

Dissipation Factor

ASTM D150

ASTM D150

0.0025

Volume Resistivity (Ohms ASTM Dcm) 257 **6.6E+15 ohms cm** 

Storage

Max Storage Temperature 40 °C / 104 °F

Shelf Life 12 mths

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The CHT technical service department is available to offer further information and advice and should it be needed to look at modifying current products or custom formulate a new one to meet your specific requirements. Please contact the technical service department.