

AS1603

1 Part RTV silicone adhesive sealant paste

Introduction

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 most plastics
- Low odour

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 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 : 02/11/2017

Download Date : 29/07/2019

Property

Uncured product

Appearance
Cure Type
Extrusion Rate g/min
FDA
Max Cure Hrs @ 25 °C
Rheology
Self Bonding
Tack Free Time mins

Cured product

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

CTE Linear ppm/°C
CTE Volumetric ppm/°C
Colour
Duro Shore A
Elongation %
Linear Shrinkage %
Max Working Temp +°C
Min Working Temp - °C
Modulus @ 100% Strain MPa
Modulus Youngs MPa
SG
Tear kN/m
Tensile MPa
Thermal Conductivity W/mK
UL 94V-0

Storage

Max storage temperature °C
Shelf life

Electrical properties

Dielectric Constant @ 1kHz
Dielectric Strength kV/mm
Dissipation Factor @ 1kHz
Surface Resistivity ohms
Volume Resistivity ohms cm

Test Method

CFR (21) 177.2600

ASTM D 2240-95

ISO 37

AFS_1540B

BS ISO 2781

BS ISO 34-1

ISO 37

Value

Translucent Paste

Oxime

390 g/min

No

12 hrs

Paste

Yes

5 mins

295 ppm/°C

888 ppm/°C

Translucent

33

300 %

0.8 %

220 °C

-50 °C

0.8 MPa

0.6 MPa

1.07

4.8 kN/m

2.15 MPa

0.2 W/mK

No

40 °C

12 mths

3

18 kV/mm

0.0025

1.36E+15 ohms

8.7E+15 ohms cm

The information and recommendations in this publication are to the best of our knowledge reliable. However, nothing herein is to be construed as warranty or representation. Users should make their own test to determine the applicability of such information or the suitability of any products for their own particular purposes. Statements concerning the user of the products described herein are not to be construed as recommending the infringement of any patent and no liability for infringement arising out of any such use is to be assumed. All values are typical and should not be accepted as a specification