

AS1604 (1050N) 1 Part low corrosive matt thixotropic adhesive sealant

Introduction

AS1604 is a fast cure 1-part RTV silicone sealant specially formulated for applications requiring a combination of good adhesion, excellent physical and non-corrosive properties. The Oxime based cure system produces excellent physical properties and good adhesion particularly to plastics and many other substrates. Although not totally neutral the cured sealant is very low corrosive in nature.

Key Features

- Resistant to fuels
- Low Corrosive
- Good Primerless adhesion

Use and Cure Information

How to Use

AS1604 is ready for use. If supplied in cartridges it can be applied using either manual or pneumatic dispensers. It can also be applied from bulk containers using conventional drum dispensing equipment.

Application and Cure

All surfaces to which **AS1604** is to be applied should be clean, dry and free from grease, dirt, and loose material. Priming of surfaces is not normally required. If it is being employed as an adhesive, it should be applied to one clean surface and the other clean surface brought into contact with it within 30 to 60 seconds. The recommended thickness of the sealant joint is 1 to 3mm for optimum bond strength. Joints should be left undisturbed for at least 24 hours, but preferably longer to effect sufficient depth of cure. Full cure requires 7 days.

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NOTE "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"

Property	Test Method	Value
Uncured Product		
Colour:		Black
Appearance:		Black paste
Tack Free Time:		3 minutes *
3mm Cure Through:		<12 hours *
Extrusion Rate:		260 g / minute
Viscosity		mPas
* measured at 23+/-2°C and 65% relative humidity.		

Cured Elastomer

(after 7 days cure at 23+/-2°C and 65% relative humidity)

Tensile Strength:	BS903 Part A2	2.00 MPa
Elongation at Break:	BS903 Part A2	250 %
Youngs Modulus:		0.50 MPa
Modulus at 100% Strain:	BS903 Part A2	1.15 MPa
Tear Strength:	BS903 Part A3	7.0 kN/m
Hardness:	ASTM D 2240-95	23° Shore A
Specific Gravity:	BS 903 Part A1	1.4
Linear Shrinkage:		0.8%
Thermal Conductivity:		0.30 W/mK
Coefficient of Thermal Expansion:		
Volumetric		837 ppm / °C
Linear		279 ppm / °C
Min. Service Temperature:		-50 °C
Max. Service Temperature:	AFS 1540B	240 °C

Electrical Properties

Volume Resistivity:	ASTM D-257	6.6E+15 Ω.cm
Dielectric Constant at 1MHz:	ASTM D-150	3.00
Dissipation Factor at 1MHz:	ASTM D-150	2.5E-+3

Adhesion Testing

Overlap Shear Strength:	ASTM D 1002	kg/cm²
Copper		
Aluminium		
Stainless Steel 304		
Polycarbonate		

Customers are advised to carry out their own tests on clean, degreased substrates to ensure satisfactory adhesion is achieved

All values are typical and should not be accepted as a specification.

Health and Safety – Material Safety Data sheets available on request.

Packages – 310 ml cartridges. Arrangements can be made to supply in bulk containers.

Storage and Shelf Life – Expected to be **12 months** in original, unopened containers below 40°C.

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