

AS1722 () 1 Part neutral cure flowable coating

Introduction

AS1722 is a specially formulated neutral cure silicone coating designed for use with sensitive electronic assemblies. It is described as an alkoxy 1-part room temperature vulcanising (RTV) silicone liquid with good flow properties. The Alkoxy cure system produces a silicone coating with excellent adhesion to most common substrates

Key Features

- High clarity
- Contains UV trace pigment
- Adhesion to many substrates
- Silcoset Primer recommended to achieve optimum adhesion

Use and Cure Information

Typical Applications

- Coating of electrical boards
- Sealing of corrosion sensitive devices
- Shallow encapsulation of small circuits and connectors

Application and Cure

After removal of the package seal the product is ready for use. It can be applied manually or using a pneumatic caulking gun. Following exposure to atmospheric moisture the product begins to cure to a resilient, durable silicone elastomer. Full cure will depend on the relative humidity and ambient temperature. At 20 to 30°C and 40 to 70% Relative Humidity a 3mm section will normally cure in less than 72 hours.

The volatile by-products of the curing mechanism are relatively inoffensive alcohols.

(See Health and Safety Data)

Full bond strength and physical properties will be achieved in 7 days.

Cure time depends on the thickness of sealant applied and the area exposed to the atmosphere.

It is recommended that a minimum thickness of 1 mm is achieved between parts to obtain best adhesion to substrates.

Revision date 09/10/2009

Property	Test Method	Value
Uncured Product		
Colour:		Clear
Appearance:		Viscous liquid
Tack Free Time:		25 minutes *
3mm Cure Through:		<72 hours *
Viscosity		40000 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	1.8 MPa
Elongation at Break:	BS903 Part A2	380 %
Hardness:	ASTM D 2240-95	25 ° Shore A
Specific Gravity:	BS 903 Part A1	1.05
Thermal Conductivity:		0.18 W/mK
Coefficient of Thermal Expansion:		
Volumetric		930 ppm / °C
Linear		310 ppm / °C
Min. Service Temperature:		-50 °C
Max. Service Temperature:	AFS 1540B	200 °C

Electrical Properties

Volume Resistivity:	ASTM D-257	1.02 E+15 Ω.cm
Dielectric Strength:	ASTM D-149	>18 kV/mm
Dielectric Constant at 1MHz:	ASTM D-150	2.60
Dissipation Factor at 1MHz:	ASTM D-150	0.0031

Adhesion Testing

AS1722 will adhere to most substrates but to utilise the full potential of AS1722, it is recommended that Silcoset Primer is applied to substrates as detailed in the Technical Data sheet. Please contact your regional ACC Sales Manager for further information

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, please contact your ACC Regional Sales Manager to discuss bulk packaging options.

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

The information and recommendations in this publication are to the best of our knowledge reliable. However nothing herein is to be construed as a warranty or representation. Users should make their own tests to determine the applicability of such information or the suitability of any products for their own particular purposes. Statements concerning the use 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.