Technical Data Sheet

AS1723 (ESP568-2)
1 Part RTV silicone adhesive sealant flowable non corrosive

Introduction

AS1723 is a translucent, liquid one part, non corrosive, condensation curing silicone elastomeric adhesive, specifically formulated to meet the needs of the electronics industry. It features fast skinning with good self levelling properties and is compatible with many sensitive substrates including copper and brass, steel, aluminium and FR4, making this an ideal option for many electronics applications such as coating or shallow depth potting.

Key Features

- Self levelling
- Low odour
- Suitable for sensitive substrates

Use and Cure Information

Typical Applications

- Assembly of electrical and electronic equipment
- 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 30ºC and 40 to 70% Relative Humidity a 3mm section will normally cure in less than 24 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.

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Property	**Test Method**	**Value**
Uncured Product		
Colour:		**Translucent**
Appearance:		**Viscous liquid**
Tack Free Time:		**11 minutes ***
3mm Cure Through:		**24 hours ***
Viscosity		**72000 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	**1.00 MPa**
Elongation at Break:	BS903 Part A2	**216 %**
Youngs Modulus:		**0.30 MPa**
Modulus at 100% Strain:	BS903 Part A2	**0.43 MPa**
Hardness:	ASTM D 2240-95	**28 ° Shore A**
Specific Gravity:	BS 903 Part A1	**1.03**
Thermal Conductivity:		**0.20 W/mK**
Coefficient of Thermal Expansion:		
Volumetric		**884 ppm / °C**
Linear		**295 ppm / °C**
Min. Service Temperature:		**-50 °C**
Max. Service Temperature:	AFS 1540B	**200 °C**

Electrical Properties

Volume Resistivity:	ASTM D-257	**4.71E+15 Ω.cm**
Dielectric Strength:	ASTM D-149	**>18 kV/mm**
Dielectric Constant at 1MHz:	ASTM D-150	**2.72**
Dissipation Factor at 1MHz:	ASTM D-150	**0.0011**

Adhesion Testing

AS1723 will adhere to most substrates but the use of a primer may be required for some applications. Please contact your regional ACC Sales Manager for further information.

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.

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

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