

SS-RTV146567 Technical Data Sheet 07/12/2016

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Technical Data Sheet

1 Part neutral self-levelling silicone sealant

SS-RTV146567 Introduction

SS-RTV141327 is a non-corrosive, 1-part, room temperature vulcanising (RTV) silicone rubber. It is one of a new family of products called acetone cure sealants that are solvent free. It exhibits excellent primerless adhesion to many substrates. The product is cured rapidly in contact with atmospheric moisture to a tough rubber. It does not corrode copper or its alloys and exhibits excellent primerless adhesion when fully cured.

Key Features

- Excellent thermal conductivity
- Non corrosive
- Fast skinning
- Low linear shrinkage
- Will meet the requirements of UL94V0

SS-RTV146567 How to use

SS-RTV141327 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.

SS-RTV146567 Application and Cure

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 15 to 20 seconds.

For optimum bond strength the thickness of the sealant joint is 1 to 2mm. Joints should be left undisturbed for at least 24 hours, but preferably longer to effect sufficient depth of cure. Full cure requires 7 days.

SS-RTV146567 Packages

SS-RTV146567 is supplied in 310ml cartridges and 25kg.

SS-RTV146567 Storage and Shelf Life

Expected to be 12 months in original unopened containers when stored at <40°C

SS-RTV146567 Health and safety

Material Safety Data Sheets are available on request.

SS-RTV146567 Electrical Properties

Volume Resistivity	ASTM D-257	1.10 ¹⁰ Ω.cm
Dielectric Strength	ASTM D-149	20 kV/mm
Dielectric Constant at 1MHz	ASTM D-150	4.90
Dissipation Factor at 1MHz	ASTM D-150	0.9x10 ⁻³
Comparative Tracking Index (CTI)		
Expected to be >600 volts (PLC 0)		

Property

Test Method

Value

Uncured Product

Colour:		Grey
Appearance:		Grey paste
Tack Free Time:		4 Minutes
3mm Cure Through:		<8 hours*
Viscosity	Brookfield	350000 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	3.90 MPa
Elongation at Break	BS903 Part A2	103 %
Young's Modulus:		
Modulus at 100% strain	BS903 Part A2	0.50 MPa
Tear Strength	BS 903 Part A3	3.0 kN/m
Hardness	ASTM D 2240-95	67 Shore A
Specific Gravity:	BS 903 Part A1	2.11
Linear Shrinkage:		0.5%
Thermal Conductivity		2.30W/mK
Coefficient of Thermal Expansion		
Volumetric		493ppm / °C
Linear		164 ppm / °C
Min. Service Temperature		-50°C
Max. Service Temperature		220°C

SS-RTV146567 Adhesion Testing

Overlap Shear Strength	ASTM D-1002	Kg/cm ³
Copper		3.60
Aluminium		7.15
Stainless Steel 304 Polycarbonate		2.98

SS-RTV146567 Health and safety

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Customers are advised to carry out their own test on clean, degreased substrates to ensure satisfactory adhesion is achieved. Stress cracking can appear on some grades of polycarbonate. Customers are advised to carry out initial testing to ensure product compatibility.

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

Limited Warranty

Silicone Solutions Ltd warrants that its product will conform to Silicone Solutions Ltd internal specifications at the time of application or use, provided that the product is stored in accordance with Silicone Solutions Ltd recommendations and used or applied before the earliest of (1) the "use before date" indicated on the product package, (2) six months from the date of shipment, or (3) expiration of such other period or recommended storage time stated in the Silicone Solutions Ltd literature for the product. If notified in writing of a claim within six months of the products use of application, Silicone Solutions Ltd will at its option replace or refund the purchase price of any Silicone Solutions product with does not satisfy the foregoing warranty.

Limitation of Liability

Silicone Solutions Ltd shall in no event whether the claim is based on warranty, contract tort, strict liability, negligence or otherwise be liable for incidental or consequential damages, or for any other damages in excess of the amount of the purchase price. Note: For many products, Silicone Solutions Ltd may be able to offer a more extensive application specific warranty. For further information, contact Silicone Solutions Ltd Sales.