

SS-RTV228819 Technical Data Sheet 09/01/2017

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Technical Data Sheet

Low Viscosity Silicone Gel

SS-RTV228819 Introduction

SS-RTV228819 is 2-component, soft, adherent, clear silicone elastomeric gel designed for the encapsulation and protection of electronic components with a 1:1 mixing ratio. It is used to provide protection from vibration, thermal or mechanical shock. It has excellent dielectric properties and also gives excellent protection from water and many environmental contaminants.

Key Features

- Simple 1:1 mix ratio
- Very Low viscosity
- Soft but resilient Gel
- Flexible down to -55°C
- Surface tension of 21.1 dynes/cm
- 0.35 water absorption at 23°C over 30 days

SS-RTV228819 Use and Cure Information

Each SS-RTV228819 component parts should be mixed in the recommended one-to-one ratio (by volume or weight).

This can be done readily either by hand or using a powered mixer, avoiding excessive aeration.

The curing process begins as soon as the components are mixed and the working or pot life of the mixed system is dependent on the ambient temperature conditions.

Note: Chilling the separate component parts before and after mixing will extend the pot life but not indefinitely.

Adhesion

Fully cured SS-RTV228819 exhibits good adhesion to most substrates such as: Aluminium, stainless steel, ABS, Polycarbonate, PCB boards and Nylon 6,6.

Inhibition of Cure

Great care must be taken when handling and mixing all addition cured silicone elastomer systems, that all the mixing tools are clean and constructed in materials which do not interfere with the curing mechanism. The cure of the rubber can be inhibited by the presence of compounds of nitrogen, sulphur phosphorus and arsenic; organotin catalysts and PVC stabilizers; epoxy resin catalysts and even contract with materials containing certain of these substances e.g. moulding clays, sulphur vulcanised rubbers, condensation cure silicone rubbers, onion and garlic.

Property	Test Method	Value
Uncured Product		
Colour		Transparent
Appearance		Clear liquid
Viscosity A part	Brookfield	630 mPa.s
Viscosity B part	Brookfield	630 mPa.s
Catalysed viscosity	Brookfield	630 mPa.s
Pot Life		>45 minutes*
SG A Part		0.97
SG B part		0.97
*measured at 23 ± 2°C and 65% relative humidity.		
Cured Elastomer		
(after 7 days cure at 23±2°C and 65% relative humidity)		
Penetration (Cone Weight):		19.5/2.5mm
Specific Gravity	BS 903 Part A1	0.97
Thermal Conductivity		0.18 W/mK
Min. Service Temperature:		-55°C
Max Service Temperature	AFS 1540B	200°C
CTE Volumetric		930 ppm/C
CTE Linear		310ppm/C

Electrical properties

Volume Resistivity	ASTM D-257	1.7+15 Ω.cm
Dielectric Strength	ASTM D-149	>18.5 kV/mm

Curing Time

Temperature °C	Time
25	<25 hrs
100	<60 mins

All values are typical and should not be accepted as specification

Storage and Shelflife

Expected to be 18 months in original unopened containers below 40°C

Health and Safety

Material safety Data Sheets are available on request.

Packages

Gels are normally packed in 2kg, 10Kg and 40kg kits for other kit sizes please contact Silicone Solutions Ltd.

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.

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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.