

SS-RTV228845 Technical Data Sheet 25/05/2016

SS-RTV228845

Technical Data Sheet

TWO-PART Optically Clear Encapsulant

SS-RTV228845 Introduction

SS-RTV228845 is a 2-component, silicone elastomer system specially designed for electronic potting applications. It offers good protection against impact damage and can be employed in areas where optical clarity and temperature resistance are prerequisite.

The cured product is a hard, medium to high modulus elastomer that can be repaired.

The component parts have relatively low viscosities and are readily mixed in a simple 1:1 ratio.

Key Features

- Optically clear
- Low viscosity
- Long pot life
- Improved inhibition resistance

SS-RTV228845 Use and Cure Information

SS-RTV228845 contains the platinum catalyst; great care should be taken when using automatic dispensing equipment. Please ensure that it is not contaminated by residual hydride containing rubber in the dispensing equipment, as curing will result. If in doubt, it's advised to thoroughly purge the equipment with a suitable hydrocarbon solvent or silicone fluid.

Place the required amount of A and B parts by weight at the ratio of 1:1 in a clean plastic or metal container of approximately 3 times their volume. Mix both the A and B parts gently to ensure homogeneity.

Degas by intermittent evacuation, the larger volume of the mixing vessel helps prevent overflow during this operation. In case of automatic dispensing with static mixing head, the two components should be degassed before processing. Recommended vacuum conditions are 50-900 mbar intermittently over 5-10 minutes. Cast the mixture either by gravity or pressure injection.

Curing Conditions

For best results and adequate pot life mix the two parts of SS-RTV228845 between 15 and 25°C. The pot life can be extended by chilling the components first.

Temperature °C Max Cure Time

25	25 hrs
100	30 Mins

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
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Uncured Product

Colour A part		Transparent
Colour B part		Transparent
Appearance		Clear liquid
Viscosity A part	Brookfield	2000 mPa.s
Viscosity B part	Brookfield	2000 mPa.s
Catalysed viscosity	Brookfield	2000 mPa.s
Pot Life		180 minutes*
SG A Part		1.02
SG B part		1.02

*measured at 23 ± 2°C and 65% relative humidity.

Cured Elastomer

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

Colour		Transparent
Tensile Strength	BS903 Part A2	5.52 MPa
Elongation Break	BS903 Part A2	300 %
Hardness	ASTM D 2240-95	45° shore A
Specific Gravity	BS 903 Part A1	1.02
Thermal Conductivity		0.18 W/mK
Coefficient of Thermal Expansion		
Volumetric		825 ppm/°C
Linear		275 ppm/°C
Min. Service Temperature:		-50°C
Max Service Temperature: AFS 1540B		200°C

Electrical properties

Volume Resistivity	ASTM D-257	1.7xE15Ω.cm
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Flammability

UL94 V-0 Rated	No
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Storage and Shelflife

Expected to be 12 months in original unopened containers below 30°C

Health and Safety

Material safety Data Sheets are available on request.

For kit sizes 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.

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.