ELASTOSIL® S 692 A/B

ELASTOSIL®

Room Temperature Curing Silicone Rubber (RTV-2)

ELASTOSIL® S 692 A/B is a self leveling, electrically conductive, addition-curing two-component silicone rubber which can be cured at room temperature or at high temperatures. Due to its low outgassing rate and low temperature flexibility it is recommended especially for space applications.
ELASTOSIL® S 692 A/B has been developed and designed as ablative adhesive to avoid static electrical chargeing effects on solar generators for space applications such as satellites.

Properties

- resistant to very low temperatures
- glass point: < - 100 °C (-148 °F)
- particularly low volatile content
- electrically conductive
- admitted for space applications acc. to specification ESA ECSS-Q-70-01A
- controlled production acc. to fixed prescription

Specific features

- Electrically conductive
- Low volatile
- Low-temperature flexible
- UV stable

Technical data

Properties Uncured

Property	Condition	A	B	Method
Color	-	black	colourless	-
Density	23.0 °C	1.09 g/cm^3	0.97 g/cm^3	DIN EN ISO 2811-1
Viscosity, dynamic	23.0 °C	-	220.0 mPa·s	DIN EN ISO 3219
Viscosity, dynamic Spindle 5, 2.5 rpm	-	70000 mPa·s	-	Brookfield

These figures are only intended as a guide and should not be used in preparing specifications.

Properties Catalyzed A+B

Property	Condition	Value	Method
Viscosity, dynamic[(1)]	-	40000.0 mPa·s	DIN EN ISO 3219
Mix ratio[(2)]	-	9 : 1	A : B
Pot life[(3)]	-	4 h	-

[1]after 5 min
[2](pbw)
[3]at 23 °C

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Properties Cured

Cure conditions: 5 min / 165 °C in press, post curing 6h / 100°C

Property	Condition	Value	Method
Hardness Shore A	-	35	DIN ISO 48-4
Tensile strength	-	1.5 N/mm²	ISO 37 type 1
Elongation at break	-	200 %	ISO 37 type 1
Volume resistivity	-	100 - 1000 Ohmcm	IEC 62631-3-1
Condensable constiturents CVCM (ECSS-Q-70-02A)	-	< 0.1 %	ECSS-Q-70-02A
Glass transition temperature	-	≤ 100.0 °C	DSC DIN EN ISO 11357-2
Total mass loss TML (ECSS-Q-70-02A)	-	< 1.0 %	ESA ECSS-Q-70-02A

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All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Application details

Before use of ELASTOSIL® S 692 A/B the components must be thoroughly stirred.

The mixing ratio is 9 : 1.

At room temperature a mixture of A and B components has a pot life of 3 - 5 hours.

Various chemicals, e. g. sulphur, tin, nitrogen compounds such as amines, amides, azides etc., antiagers in plastics and rubbers etc., may cause a delay in vulcanisation or, in infavourable cases, prevent it. Therefore we recommend to test all materials with regard to their compatibility with ELASTOSIL® S 692 A/B.

To obtain adhesion to other materials (e. g. glass, aluminium, epoxide, polyester, polyimide), it is necessary to pretreat the surface with Primer G 790 or G 790 diluted 1 : 1 with an aliphatic hydrocarbon solvent (e. g. Isopar E or Esso AG, boiling range 110 - 140 °C at 1 bar).

Detailed processing instructions are given in our brochure “ROOM TEMPERATURE VULCANIZING (RTV) SILICONES - MATERIAL AND PROCESSING GUIDELINES

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site http://www.wacker.com.

QR Code ELASTOSIL® S 692 A/B

For technical, quality or product safety questions, please contact:

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