ELASTOSIL® RT 6242 A/B

Room Temperature Curing Silicone Rubber (RTV-2)

Non-sag, addition-curing, two-component thermal curing silicone especially suited for Fuel Cell Sealing

Properties

- non-sag, in particular suitable for CIPG seals on fuel cell parts like bipolar plates
- high tear resistance
- long potlife at ambient temperature
- high reactivity already at 100 °C
- outstanding compression set
- suitable for LIM process
- cure at low mold temperature possible
- high resistance to fuel cell environment

Technical data

Properties Uncured

Property	Condition	A	B	Method
Color	-	translucent	translucent	-
Density	23.0 °C	1.05 g/cm³	1.05 g/cm³	DIN EN ISO 2811-1
Viscosity, dynamic (D = 0,5 1/s)	23.0 °C	250000 mPa·s	250000 mPa·s	ISO 3219

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

Catalyzed

Property	Condition	Value	Method
Viscosity, dynamic (D = 0.5 1/s)	23.0 °C	250000 mPa·s	ISO 3219
Viscosity, dynamic (D = 25 1/s)	23.0 °C	50000 mPa·s	ISO 3219
Mix ratio	-	1:1 pbw	-
Pot life[(1)]	-	6 h	-
Kick-off temperature	-	100 °C	ISO 6502
T20	110.0 °C	40 s	-
T90	110.0 °C	70 s	ISO 6502

[1]at 23 °C

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Properties Cured

Cure conditions: 5 min / 165 °C in press

Property	Condition	Value	Method
Color	-	translucent	-
Density in water	23.0 °C	1.05 g/cm^3	DIN EN ISO 1183-1 A
Tear strength	-	> 12 N/mm	ASTM D 624 B
Hardness Shore A	-	40	DIN ISO 48-4
Tensile strength	-	5.0 N/mm^2	ISO 37 type 1
Tensile strength	-	5 N/mm^2	ISO 37 type 1
Elongation at break	-	300 %	ISO 37 type 1
Coefficient of linear expansion	0.0 - 150.0 °C	2.82 x 10^{-4} m/mK	-
Compression Set	22.0 h | 120.0 °C	5 %	DIN ISO 815-1 type B method A

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Applications

- Bonding & Sealing
- Cured-In-Place-Gaskets (Dry Type)

Application details

Important The platinum catalyst is contained in Component A.

Only components A and B that have the same lot number may be processed together! Mixing of the components To ensure both optimum flow and, in case a Pigment Paste FL was added, also full homogeneity of the material by uniformly dispersing any pigment that might have settled during storage, the components should be stirred thoroughly before they are removed from or processed in their containers. It is absolutely imperative that any equipment, such as mixing vesses, spatulas and stirrers, that is used to process Component A (which contains the platinum catalyst) or the mixture of both components does not come in contact with Component B (which contains the crosslinker).Therefore, all equipment should be clearly labeled.
The material does not contain adhesion promotors in order to exhibit the best possible compression set. For achieving adhesion to substrates, surfaces have to be treated with Primer G790 or G795. On duromeric or thermoplastic materials, plasma treatment can be sufficiently. Trials are obligatory to define a suitable surface preparation

- silicone rubber for temperature sensitive sealing applications

- particularly suitable for fuel cell seals

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® RT 6242 A/B

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

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