

ELASTOSIL[®] M 4600 A/B

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Room Temperature Curing Silicone Rubber (RTV-2)

Pourable, addition-curing, two-component silicone rubber that vulcanizes at room temperature.

Main application: Making shrink-free molds with excellent reproduction accuracy, food contact (FDA/ BfR compliant).



Properties

- Very good flow
- Fast and non-shrink cure at room temperature which
- Can be accelerated considerably by the application of heat
- Low Shore A hardness (approx. 20)
- Good transparency
- High tear strength
- Excellent long-term stability of the mechanical properties of the cured rubber
- Outstanding resistance to common casting resins

Specific features

- Addition Curing
- BfR compliant
- FDA compliant
- Flowable
- Food-contact
- No chemical shrinkage
- Two-component

Technical data

Properties Uncured

Property	Condition	A	B	Method
Color	-	translucent	colorless	-
Density	23 °C	1.10 g/cm ³	1 g/cm ³	DIN EN ISO 2811-1
Viscosity, dynamic after stirring	23 °C	20000 mPa·s	12000 mPa·s	ISO 3219

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	23 °C	15000 mPa·s	ISO 3219
Mix ratio ⁽¹⁾	-	10 : 1	A : B
Pot Life (up to 60,000 mPas)	23 °C	90 min	DIN EN ISO 2555
Curing time tack free	-	12 h	-

⁽¹⁾(pbw)

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Properties Cured

Vulcanizate after 24 h at 23 °C

Property	Condition	Value	Method
Color	-	translucent	-
Density in water	23 °C	1.10 g/cm ³	ISO 2781
Tear strength	-	> 20 N/mm	ASTM D 624 B
Hardness Shore A	-	20	ISO 868
Tensile strength	-	7	ISO 37
Elongation at break	-	800 %	ISO 37
Linear shrinkage	-	< 0.1 %	-

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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.

Applications

- Reproduction Molding

Application details

Due to the outstanding resistance to casting resins as well as the superior mechanical properties, ELASTOSIL® M 4600 A/B is especially suitable for all molds of models with extensive undercuts that are to be reproduced in casting resins.

In addition to the low hardness, which facilitates demolding, ELASTOSIL® M 4600 A/B has the advantage of being transparent. This makes it possible to cut onepart molds under visual control along a parting line which has been established before or is determined by the shape of the model, a method which often saves making a two- or multi-part mold.

As a low-Shore addition-curing RTV-2 silicone rubber that cures without undergoing dimensional shrinkage, ELASTOSIL® M 4600 A/B is also extremely suitable for casting all other common reproduction materials, particularly if absolutely accurate copies of models with pronounced undercuts are required

Processing

Detailed instructions for preparation and use are given in the brochure "Room Temperature Vulcanizing (RTV) Silicones - Material and Processing Guidelines".

Important note:

The platinum catalyst is in **component B**.

Caution:

A and B components may only be used together if they have the same batch number.

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® M 4600 A/B



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

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