

# ELASTOSIL<sup>®</sup> 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
- High mechanical strength yet good elasticity
- No shrinkage
- Two-component

## Technical data

### Properties Uncured

Property	Condition	A	B	Method
Color	-	translucent	colorless	-
Density	23 °C	1.10 g/cm <sup>3</sup>	1 g/cm <sup>3</sup>	-
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.

### Catalyzed

Property	Condition	Value	Method
Viscosity, dynamic	23 °C	15000 mPa·s	ISO 3219
Mix ratio <sup>(1)</sup>	-	10 : 1	A : B
Curing time tack-free	-	12 h	-
Processing time	60000 mPa·s	80 min	-

<sup>(1)</sup>(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 <sup>3</sup>	-
Pot life	-	90 min	-
Hardness Shore A	-	20	ISO 868
Tensile strength	-	7	ISO 37
Elongation at break	-	800 %	ISO 37
Linear shrinkage	-	< 0.1 %	-
Tear strength	-	> 20 N/mm	ASTM D 624 B

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## Applications

- Reproduction Molding for Foundry, Arts and Handicrafts

## 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

Important note:

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

Important:

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

**Please check also our brochures and info sheets.**

## 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

Components A and B of the addition-curing grade ELASTOSIL® M 4600 A/B contain only constituents that over many years have proved to be neither toxic nor aggressive. Special handling precautions are therefore not required, i.e., only the general industrial hygiene regulations apply.

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:

**Wacker Chemie AG**, Hanns-Seidel-Platz 4, 81737 Munich, Germany  
[info@wacker.com](mailto:info@wacker.com), [www.wacker.com](http://www.wacker.com)

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