

# ELASTOSIL<sup>®</sup> M 4643 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.



## Properties

- very good flow
- fast and non-shrink cure at room temperature which can be accelerated considerably by the application of heat
- medium Shore A hardness (approx. 48)
- high tear strength
- long-term stability of the vulcanizate's mechanical properties
- outstanding resistance to common casting resins

## Technical data

### Properties Uncured

Property	Condition	A	B	Method
Viscosity, dynamic after stirring	23 °C	40000 mPa·s	800 mPa·s	ISO 3219
Density	23 °C	1.37 g/cm <sup>3</sup>	1 g/cm <sup>3</sup>	-
Color	-	white	dark gray	-

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

### Properties Catalyzed A+B

Property	Condition	Value	Method
Curing time tack-free	-	12 h	-
Pot Life	23 °C   60000 mPa·s	90 min	-
Mix ratio	-	9 : 1 pbw	A : B
Viscosity, dynamic	23 °C	25000 mPa·s	ISO 3219

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## Properties Cured

Vulcanizate after 24 h at 23 °C

Property	Condition	Value	Method
Linear shrinkage	-	< 0.1 %	-
Elongation at break	-	300 %	ISO 37
Tensile strength	-	5 N/mm <sup>2</sup>	ISO 37
Hardness Shore A	-	48	ISO 868
Density in water	23 °C	1.31 g/cm <sup>3</sup>	ISO 2781
Color	-	gray	-
Tear strength	-	> 10 N/mm	ASTM D 624 B

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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

- Industrial molding
- Automotive molding
- Reproduction molding for foundry, arts and handicraft

## Application details

Due to its outstanding resistance to casting resins as well as its superior mechanical properties ELASTOSIL® M 4643 A/B is perfectly suitable for all molds of models with undercuts that are to be reproduced in casting resins, and a certain inherent rigidity of the molds is required.

As a medium-Shore addition-curing RTV-2 silicone rubber that cures without undergoing dimensional shrinkage, ELASTOSIL® M 4643 A/B is also extremely suitable for casting all other common reproduction materials, particularly if absolutely accurate copies of models with 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 of the addition-curing grade ELASTOSIL® M 4643 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 4643 A/B



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

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