

ELASTOSIL[®] M 4643 A/B

ELASTOSIL[®]

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
- medium Shore A hardness (approx. 48)
- high tear strength
- long-term stability of the vulcanizate's mechanical properties
- outstanding resistance to common casting resins

Specific features

- Addition Curing
- Flowable
- No chemical shrinkage
- Resistance against casting resins
- Two-component

Technical data

Properties Uncured

Property	Condition	A	B	Method
Color	-	white	dark gray	-
Density	23 °C	1.37 g/cm ³	1 g/cm ³	DIN EN ISO 2811-1
Viscosity, dynamic after stirring	23 °C	40000 mPa·s	800 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	25000 mPa·s	ISO 3219
Mix ratio ⁽¹⁾	-	9 : 1	A : B
Pot Life up to 60000 mPas	23 °C	90 min	DIN EN ISO 2555
Curing time tack-free	23 °C	12 h	-

¹pbw

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

Properties Cured

curing conditions: 24 h / 23 °C

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

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

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

- Automotive molding
- Reproduction Molding

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

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 www.wacker.com.

QR Code ELASTOSIL® M 4643 A/B



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

Wacker Chemie AG, Gisela-Stein-Strasse 1, 81671 Munich, Germany
productinformation@wacker.com, www.wacker.com

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.