

ELASTOSIL[®] M 4645 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: Vacuum casting for rapid prototyping.



Properties

- very good flow
- excellent mould release, usually no further release agent required
- fast and non-shrink cure at room temperature which can be accelerated considerably by the application of heat
- medium Shore A hardness (approx. 40)
- good transparency of the cured rubber
- high tear strength
- outstanding resistance to casting resins, particularly polyurethanes and epoxies, for long service life of the molds
- strong oil-bleeding

Specific features

- Addition-curing
- Excellent mechanical properties
- No shrinkage
- Strong oil bleeding
- Two-component

Technical data

Properties Uncured

Property	Condition	A	B	Method
Color	-	translucent	colourless	-
Density	23 °C	1.08 g/cm ³	0.97 g/cm ³	-
Viscosity, dynamic after stirring	23 °C	50000 mPa·s	3500 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	35000 mPa·s	ISO 3219
Mix ratio ⁽¹⁾	-	10 : 1	A : B
Pot life ⁽²⁾	-	80 min	-
Curing time tack-free	-	12 h	-

¹(pbw)

²at 23 °C, up to 150000 mPa·s

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Properties Cured

Vulcanizate after 24 h at 23 °C

Property	Condition	Value	Method
Color	-	translucent	-
Density in water	23 °C	1.06 g/cm ³	ISO 2781
Hardness Shore A	-	40	ISO 868
Tensile strength	-	5 N/mm ²	ISO 37
Elongation at break	-	330 %	ISO 37
Linear shrinkage	-	< 0.1 %	-
Tear strength	-	> 28 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

- Prototype Molding

Application details

High-performance silicone mold-making compound which is particularly suitable for reproducing models with undercuts in polyurethane or epoxy resins.

Main field of application: Vacuum casting for rapid prototyping.

Processing

Important note:

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

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 4645 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 4645 A/B



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

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