

ELASTOSIL® M 4600 A/B

RTV-2 Silicone Rubber / Mold Making

Characteristics

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

Special characteristics

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

Application

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 one-part 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.

Product data (uncured)

Property	Test method	Unit	Value	
Component			A	B
Color			Translucent	Colorless
Density at 23 °C		[g/cm ³]	1.10	1.00
Viscosity at 23 °C, after stirring	ISO 3219	[mPa s]	20,000	12,000

Product data (catalyzed A + B)

Property	Test method	Unit	Value
Mixing ratio	A : B	[pbw]	10 : 1
Viscosity at 23 °C	ISO 3219	[mPa s]	15,000
Pot-life (up to 60,000 mPas)		[min]	90
Curing time, tack-free		[h]	12

Product data (cured)

Property	Test method	Unit	Value
Color			Translucent
Density at 23 °C in Water	ISO 2781	[g/cm ³]	1.10
Hardness Shore A	ISO 868		20
Tensile strength	ISO 37	[N/mm ²]	7.0
Elongation at break	ISO 37	[%]	800
Tear strength	ASTM D 624 B	[N/mm]	> 20
Linear shrinkage		[%]	< 0.1
After 24 h at 23 °C.			

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

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

The platinum catalyst is contained in component B.

Caution

Only components A and B with the **same lot number** may be processed together!

Comprehensive instructions are given in our leaflet "Wacker RTV-2 Silicone Rubber - Processing."

Detailed information on other mold-making compounds in the ELASTOSIL® M range is contained in our brochure "ELASTOSIL® M. Mold-Making Compounds For Maximum Precision".

Storage

Components A and B of ELASTOSIL® M 4600 should be stored between 5 °C and 30 °C in the tightly closed original container. The 'Best use before end' date of each batch appears 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 information

Components A and B of the addition-curing grade ELASTOSIL® M 4600 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.

Detailed safety information is contained in each Material Safety Data Sheet, which can be obtained from our sales offices.

Additional information

Please visit our website www.wacker.com

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The data presented in this leaflet 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 leaflet 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 recommendations do 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 products for a particular purpose.

The management system has been certified according to DIN EN ISO 9001 and DIN EN ISO 14001

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