

# ELASTOSIL® M 4370 A/B

RTV-2 SILICONE RUBBER / MOLD MAKING

## **Product description**

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

## **Special features**

- very good flowability and self-deaeration
- fast and non-shrink cure at room temperature which can be accelerated considerably by the application of heat
- high hardness (Shore A approx. 55)
- very good heat resistance
- high thermal conductivity
- outstanding resistance to common casting resins

## Application

Being an addition-curing and thus a non-shrink vulcanizing rubber with high hardness, ELASTOSIL® M 4370 A/B is particularly suitable for molding applications in which high elongation and tear resistance can be sacrificed in favor of excellent deformation resistance and thermal stability, e. g., for making molds of models with nor or only minor undercuts if, in addition to absolute accuracy of reproduction, good heat dissipation and high rigidity are required.

Typical applications are molds with

- high rigidity for foaming resins

- high swelling resistance to components of casting resins, such as styrene in the case of polyesters
- high thermal stability and heat dissipation for casting low-melting metal alloys

## 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.

Thin-walled molds are best suited for casting low-

melting metal alloys (melting point: 300 °C max.) and should be placed on a sheet of aluminum or other material with high thermal conductivity. Before the casting process, the old should be postcured for a few hours at about 150 °C. In order to improve wetting by the molten metal, a thin layer of extremely fine silicon carbide, graphite powder or acetylene black should be applied to the mold surface.

The first castings have normally to be discarded since the rubber still emits gases, giving the surface of the casting a pockmarked appearance.

Comprehensive instructions are given in our leaflet "ELASTOSIL® - PROCESSING RTV-2 SILICONE RUBBERS".

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

## 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.

# Additional information

Please visit our website www.wacker.com.

## Safety notes

Components A and B of the addition-curing grade ELASTOSIL® M 4370 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.

#### Product data

Typical general characteristics	Inspection Method	Value
Product data (uncured)		
Component A		
Color		reddish brown
Density at 23 °C		1,50 g/cm <sup>3</sup>
Viscosity at 23 °C, after stirring	ISO 3219	10000 mPa s
Component B		
Color		colorless
Density at 23 °C		0,97 g/cm <sup>3</sup>
Viscosity at 23 °C, after stirring	ISO 3219	350 mPa s
Product data (catalyzed A + B)		
Mix ratio (pbw)	A : B	9:1
Viscosity at 23 °C	ISO 3219	8000 mPa s
Pot life at 23 °C, up to 60000 mPa s		80 min
Cure time, tack-free		6 h
Product data (cured)		
Color		reddish brown
Density at 23 °C in water	ISO 2781	1,43 g/cm <sup>3</sup>
Hardness Shore A	ISO 868	55
Tensile strength	ISO 37	3,00 N/mm <sup>2</sup>
Elongation at break	ISO 37	130 %
Tear strength	ASTM D 624 B	> 4 N/mm
Linear shrinkage		< 0,1 %

These figures are only intended as a guide and should not be used in preparing specifications. Vulcanizate after 24 h at 23  $^{\circ}\text{C}$ 

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

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