

Supplied by

**AMBERCOMPOSITES**

# ELASTOSIL® M 4370 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 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

## Product data (uncured)

Property	Test method	Unit	Value	
Component			A	B
Color			Reddish brown	Colorless
Density at 23 °C		[g/cm <sup>3</sup> ]	1.50	0.97
Viscosity at 23 °C, after stirring	ISO 3219	[mPa s]	10,000	350

## Product data (catalyzed A + B)

Property	Test method	Unit	Value
Mixing ratio	A : B	[pbw]	9 : 1
Viscosity at 23 °C	ISO 3219	[mPa s]	8,000
Pot life at 23 °C (up to 60,000 mPas)		[min]	80
Curing time, tack-free		[h]	6

## Product data (cured)

Property	Test method	Unit	Value
Color			Reddish brown
Density at 23 °C in Water	ISO 2781	[g/cm <sup>3</sup> ]	1.43
Hardness Shore A	ISO 868		55
Tensile strength	ISO 37	[N/mm <sup>2</sup> ]	3.0
Elongation at break	ISO 37	[%]	130
Tear strength	ASTM D 624 B	[N/mm]	> 4
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.

## Processing

### Important:

The platinum catalyst is contained in component A.

### Caution!

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

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 mold should be post-cured for a few hours at about 150 °C. In order to improve wetting by the molten metal, a thin layer of extremely fine silicone carbide, graphite powder or acetylene black should be applied to the mold surface.

The first castings normally have 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 "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

ELASTOSIL® M 4370 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 4370 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](http://www.wacker.com)

*Supplied by*

# AMBERCOMPOSITES

94 Station Road, Langley Mill  
Nottingham, NG16 4BP United Kingdom  
T: +44 (0)1773 530899 F: +44 (0)1773 768687  
E: [sales@ambercomposites.com](mailto:sales@ambercomposites.com)  
[www.ambercomposites.com](http://www.ambercomposites.com)

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

**WACKER**

and ELASTOSIL® are registered trademarks of Wacker Chemie AG.

Version 7.00 from 27-08-07 replaces Version 6.00 from 11-04-07

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

Wacker Chemie AG  
WACKER-SILICONES  
Hanns-Seidel-Platz 4  
D-81737 Munich, Germany

[www.wacker.com](http://www.wacker.com)  
[silicones@wacker.com](mailto:silicones@wacker.com)