ELASTOSIL® M 4370 A/B

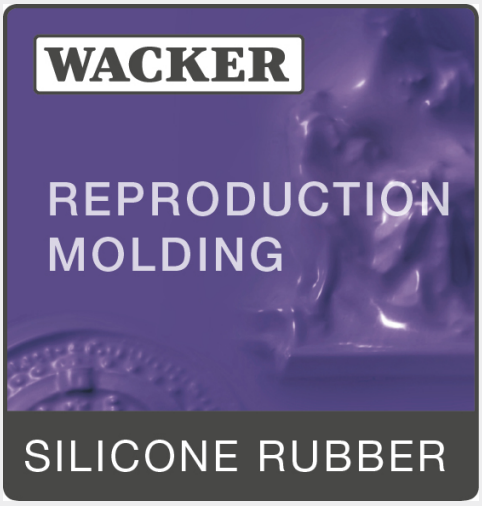
ELASTOSIL®

Room Temperature Curing Silicone Rubber (RTV-2)

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

Main application: Silicone surface for printing rollers, making molds for casting low-melting metal alloys.

Food contact (FDA/ BfR compliant).



Properties

- 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
- Outstanding resistance to common casting resins

Special features

- BfR compliant
- FDA compliant

Technical data

Properties Uncured

Property	Condition	A	B	Method
Viscosity, dynamic after stirring	23 °C	10000 mPa·s	350 mPa·s	-
Density	23 °C	1.5 g/cm^3	-	-
Density	23.0 °C	-	1.05 g/cm^3	-
Color	-	reddish brown	colorless	-

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

Properties Catalyzed A+B

Property	Condition	Value	Method
Curing time tack-free	-	6.0 h	-
Pot Life (up to 60,000 mPas)	-	80 min	-
Mix ratio[(1)]	-	9 : 1	A : B
Viscosity, dynamic	23 °C	8000 mPa·s	-

[1](pbw)

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Properties Cured

Property	Condition	Value	Method
Linear shrinkage (after 24 h at 23°C)	-	< 0.1 %	-
Elongation at break	-	130 %	ISO 37
Tensile strength	-	3.0 N/mm^2	ISO 37
Hardness Shore A	-	55	ISO 7619-1
Density	23.0 °C	1.43 g/cm^3	ISO 2781
Color	-	reddish brown	-
Tear strength	-	> 4 N/mm	ASTM D 624 B

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Applications

- Industrial molding
- Reproduction molding for foundry, arts and handicraft

Application details

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

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 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 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 "ROOM TEMPERATURE VULCANIZING (RTV) SILICONES".

Detailed information on other mold-making compounds in the ELASTOSIL ® M range is contained in our brochure "MOLDMAKING: FORM HAS NO LIMITS".

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 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.

QR Code ELASTOSIL® M 4370 A/B

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

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