

ELASTOSIL[®] M 4400

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Room Temperature Curing Silicone Rubber (RTV-2)

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

Main application: Making cost effective molds, especially suited for PE resin, wax or plaster castings.



Properties

- Good flowability and self-deaeration
- Low Shore A hardness (approx. 23)
- Great extensibility and elasticity
- Very good resistance to casting resins, particularly polyester

Specific features

- Condensation-curing
- Two-component

Technical data

Properties Uncured

Property	Condition	Value	Method
Color	-	pale yellow	-
Viscosity, dynamic after stirring	23 °C	30000 mPa·s	DIN EN ISO 3219
Density	20 °C 1013 hPa	approx. 1.3 g/cm ³	DIN 53217

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

Catalyzed

(catalyzed with 3 wt % Catalyst T 37, after 4 days at 23 °C / 50 % rel. humidity)

Property	Condition	Value	Method
Viscosity, dynamic	23 °C	25000 mPa·s	ISO 3219

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Properties Cured

Property	Condition	Value	Method
Color	-	pale yellow	-
Density in water	23 °C	1.3 g/cm ³	ISO 2781
Hardness Shore A	-	23	ISO 868
Tensile strength	-	2 N/mm ²	ISO 37
Elongation at break	-	250 %	ISO 37
Linear shrinkage T 37	3 %	0.7 %	-
Linear shrinkage T40	2 %	0.4 %	-
Tear strength	-	> 3 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

- Elastomers for Pad Printing

- Reproduction Molding for Foundry, Arts and Handicrafts

Application details

Due to its good flow characteristics and its low modulus, ELASTOSIL® M 4400 is particularly suitable as a mold-making material for reproducing intricate structures, even if minor undercuts are involved.

The good resistance to casting resins, especially polyester resins, enables large numbers of castings to be taken from one mold. Other materials, such as plaster or wax, may also be cast without any problems from molds made of ELASTOSIL® M 4400.

Due to the low hardness of the cured rubber and its excellent ink transfer performance, ELASTOSIL® M 4400 is also highly suitable as a starting material for the production of printing pads.

Processing

ELASTOSIL® M 4400 is cured by adding Catalyst T37 for long pot lives and curing times, or Catalyst T40 for short pot lives and curing times.

The pot life is the period of time at 23 °C / 50 % rel. humidity during which the catalyzed mix to attain a viscosity of 100,000 mPas and still be just pourable

Catalyst	Pot life, approx. [min]	Curing time (tack-free), approx. [h]
3 % T 37	90	9-12
2 % T 40	40	5-7

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

Being a condensation-curing silicone rubber, ELASTOSIL® M 4400 contains 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.

Catalysts T 37 and T 40 contain a tetraorganotin compound, are flammable and may cause irritation in contact with the eyes and skin. Adequate protective measures are required.

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 4400



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

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