

ELASTOSIL[®] M 4503

ELASTOSIL[®]

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, particularly for casting PE resins.



Properties

- Good flow
- Low Shore A hardness (approx. 25)
- Great extensibility and elasticity
- High resistance to casting resins, particularly polyesters

Specific features

- Condensation-curing
- Flowable
- Two-component

Technical data

Properties Uncured

Property	Condition	Value	Method
Color	-	white	-
Density	23 °C	1.16	ISO 2811
Viscosity, dynamic after stirring	23 °C	40000 mPa·s	ISO 3219

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

Catalyzed

with 2 wt % Catalyst T 40

Property	Condition	Value	Method
Pot Life up to 60000 mPas	23 °C	75 min	DIN EN ISO 2555
Demoldable at 23 °C after	-	20 h	-

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

Properties Cured

with 2 wt % Catalyst T 40, after 7 days at 23 °C / 50 % rel. humidity.

Property	Condition	Value	Method
Color	-	white	-
Density in water	23 °C	1.16 g/cm ³	ISO 2781
Tear strength	-	> 20 N/mm	ASTM D 624 B
Hardness Shore A	-	25	DIN ISO 48-4
Tensile strength	-	20 N/mm ²	ISO 37
Elongation at break	-	350 %	ISO 37
Linear shrinkage at 23°C	-	0.5 %	-

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

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

- Reproduction Molding

Application details

Due to its good mechanical properties of the cured material as well as its high resistance to polyester resins, ELASTOSIL® M 4503 is particularly suitable as a mold-making material for reproducing models with very pronounced undercuts in polyester resins.

Other materials, such as plaster or wax, may also be cast without any problems from molds made of ELASTOSIL® M 4503.

Processing

Processing

ELASTOSIL® M 4503 is cured by adding 2 wt % Catalyst T 40. Pot life and curing time may be accelerated, and thus adjusted to suit the individual application by adding up to 4 wt % Catalyst T 40.

Further instructions for preparation and use are given in our brochure "Room Temperature Vulcanizing (RTV) Silicones - Material and Processing Guidelines".

Detailed information on other mold-making compounds in the ELASTOSIL® M range is contained in our brochure "ELASTOSIL® M. Silicone Rubber for Mold Making".

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

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 www.wacker.com.

QR Code ELASTOSIL® M 4503



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

Wacker Chemie AG, Gisela-Stein-Strasse 1, 81671 Munich, Germany
productinformation@wacker.com, www.wacker.com

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.