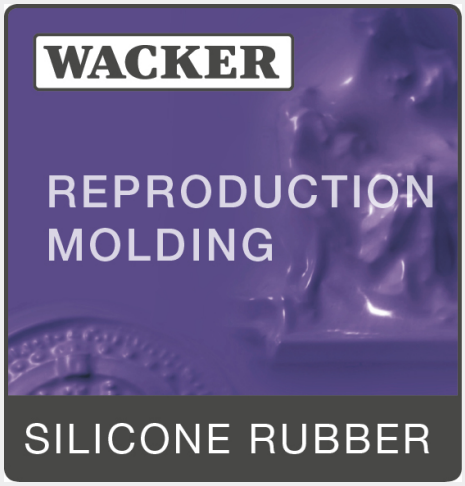
ELASTOSIL® M 4541

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, especially suited for casting PE and PU resins.



Properties

- very good flowability and self-deaeration
- medium Shore A hardness (approx. 32)
- excellent tear strength
- high elongation and flexibility
- outstanding chemical resistance to attack by polyester and polyurethane resins, mold life is significantly extended

Specific features

- Condensation-curing
- Excellent mechanical properties
- Two-component

Technical data

Properties Uncured

Property	Condition	Value	Method
Color	-	white	-
Viscosity, dynamic after stirring	23 °C	40000 mPa·s	ISO 3219
Density	23 °C | 1013 hPa	approx. 1.18 g/cm^3	-

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

Catalyzed

(catalyzed with 5 wt % Catalyst T 51, after 4 days at 23 °C / 50 % rel. humidity)

Property	Condition	Value	Method
Viscosity, dynamic	23 °C	35000 mPa·s	ISO 3219

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

Properties Cured

Property	Condition	Value	Method
Density in water	23 °C	1.16 g/cm^3	ISO 2781
Hardness Shore A	-	32	ISO 868
Tensile strength	-	5 N/mm^2	ISO 37
Elongation at break	-	400 %	ISO 37
Linear shrinkage	-	< 0.4 %	-
Tear strength	-	> 30 N/mm	ASTM D 624 B

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Applications

- Reproduction Molding for Foundry, Arts and Handicrafts

Application details

ELASTOSIL® M 4541 is a high-performance moldmaking compound, which is particularly suitable for the reproduction of models with extensive undercuts.

ELASTOSIL® M 4541 is especially suitable for the processing of polyester and polyurethane resins.

Processing

If molds for processing epoxy or polyurethane resins are to be made, ELASTOSIL® M 4541 is cured by adding 5 wt % Catalyst T 21.

Catalyst	Pot life, [min]	Curing time (tack-free), [h]
5 % T 21	60-90	8-10
5 % T 51	60-90	8-10

For molds used to process other reproduction materials such as polyester resins, plaster, concrete, synthetic stone, wax or low-melting alloys, 5 wt % Catalyst T 51 should be used.

Pot lifes and curing times of both catalysts may be accelerated, and thus adjusted to suit the individual application by blending with Catalyst T 47. For faster curing either catalyst may be blended with Catalyst T 47. E.g. at a ratio of 95 : 5 (T51 : T47) the pot life decreases to about 30 min, and the mold needs only about 4 h to cure.

Further instructions on blending any catalyst with Catalyst T 47 may be found in our data-sheet: **"WACKER® T-series catalysts".**

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 mPa s and still be just pourable

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 4541 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 21, T 51 and T 47 contain organotin compounds, are flammable (flash points 50 °C) and may cause irritation in contact with 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 4541

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

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