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AMBERCOMPOSITES

ELASTOSIL® M 3500

RTV-2 Silicone Rubber / Mold Making

Characteristics

Spreadable, non-sag, condensation-curing, two-component silicone rubber that vulcanizes at room temperature.

Special characteristics

- Low Shore A hardness (approx. 20)
- Excellent non-sag performance (will not run off vertical surfaces)
- Good transparency
- Exceptional tear strength
- Excellent long-term stability of the mechanical properties of the cured rubber

Application

Due to its specific processing characteristics and mechanical properties, ELASTOSIL® M 3500 is a perfect material for making skin molds.

The exceptional mechanical strength of the cured rubber allows the mold to be stripped off without being damaged, even if the model has very deep undercuts. The transparency of ELASTOSIL® M 3500 facilitates the production of skin molds of uniform thickness without air bubbles at the surface of the model.

Processing

When stored for a prolonged period, particularly at temperatures above 30 °C, ELASTOSIL® M 3500 may have a somewhat thicker consistency than usual. Stirring it thoroughly **before** adding the catalyst will mostly reverse this thickening and produce the optimum consistency for processing. Since this will also cause it to warm up, it should be allowed to cool to room temperature before the catalyst is incorporated.

ELASTOSIL® M 3500 is cured by adding Catalyst T 35 for long pot lives and curing times, or Catalyst T 46 for short pot lives and curing times.

Catalyst	Pot life, approx. [min]	Curing time (tack-free) [h]
4 % T 35	150	20-24
5 % T 35	80	15-20
4 % T 46	40	8-10
5 % T 46	20	6-8

Product data (uncured)

Property	Test method	Unit	Value
Color			Translucent
Density at 23 °C		[g/cm ³]	1.11
Consistency			Pasty, non-sag

Product data (catalyzed with 5 wt % Catalyst T 35)

Property	Test method	Unit	Value
Non-sag performance	Layer thickness	[mm]	≤ 10

Product data (cured)

Property	Test method	Unit	Value
Density at 23 °C in water	ISO 2781	[g/cm ³]	1.10
Hardness Shore A	ISO 868		20
Tensile strength	ISO 37	[N/mm ²]	4.0
Elongation at break	ISO 37	[%]	700
Tear strength	ASTM D 624 B	[N/mm]	> 30
Linear shrinkage		[%]	0.6

With 5 wt % Catalyst T 35, after 7 days at 23 °C / 50 % rel. humidity.

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

The pot life is the period of time at 23 °C / 50 % rel. humidity during which the catalyzed mix remains spreadable.

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 3500 should be stored between 5 °C and 30 °C in the tightly closed original container.

Catalysts T 35 and T 46 should be stored in the sealed original bottles between 5 °C and 25 °C. 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

Being a condensation-curing silicone rubber, ELASTOSIL® M 3500 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 35 and T 46 contain a tetraorganotin compound, is flammable (flash points 50 °C and 34 °C) and may cause irritation in contact with the eyes and skin. Adequate protective measures are required.

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

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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

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