

ELASTOSIL® M 4641 A/B



Room Temperature Curing Silicone Rubber (RTV-2)

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

Main application: Vacuum casting for rapid prototyping especially suitable if crystal-clear casting resins are used.

Food contact (FDA/ BfR compliant).



Properties

- · Very good flow
- Fast and non-shrink cure at room temperature which can be accelerated considerably by the application of heat
- Medium Shore A hardness (approx. 43)
- Good transparency of the cured rubber
- · High tear strength
- Outstanding resistance to casting resins, particularly polyurethanes and epoxies, for long service life of the molds
- Oil-free surfaces for crystal-clear resins

Specific features

- Addition-curing
- BfR compliant
- Excellent mechanical properties
- FDA compliant
- · Low viscosity
- No shrinkage
- · Non oil bleeding
- Two-component

Technical data

Properties Uncured

| Property | Condition | Α | В | Method |
|-----------------------------------|-----------|------------------------|------------------------|----------|
| Color | - | translucent | colourless | - |
| Density | 23 °C | 1.08 g/cm ³ | 0.97 g/cm ³ | - |
| Viscosity, dynamic after stirring | 23 °C | 50000 mPa·s | 400 mPa·s | ISO 3219 |

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

Catalyzed

| Property | Condition | Value | Method |
|-------------------------|-----------|-------------|----------|
| Viscosity, dynamic | 23 °C | 30000 mPa·s | ISO 3219 |
| Mix ratio | - | 10:1 | A : B |
| Pot life ⁽¹⁾ | - | 90 min | - |
| Curing time tack-free | - | 12 h | - |

¹at 23 °C, up to 150000 mPa s

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Properties Cured

Vulcanizate after 24 h at 23 °C

| Property | Condition | Value | Method |
|---------------------|-----------|------------------------|--------------|
| Color | - | translucent | - |
| Density in water | 23 °C | 1.07 g/cm ³ | ISO 2781 |
| Hardness Shore A | - | 43 | ISO 868 |
| Tensile strength | - | > 4.5 N/mm² | ISO 37 |
| Elongation at break | - | > 300 % | ISO 37 |
| Linear shrinkage | - | < 0.1 % | - |
| Tear strength | - | > 25 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

Prototype Molding

Application details

High-performance silicone mold-making compound which is particularly suitable for reproducing models with undercuts in polyurethane or epoxy resins.

Main field of application:

Vacuum casting for rapid prototyping especially suitable if crystal-clear casting resins are used.

Processing

Important note:

The platinum catalyst is in component A.

Important:

 $\ensuremath{\mathsf{A}}$ and $\ensuremath{\mathsf{B}}$ components may only be used together if they have the same batch number.

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

Components of the addition-curing grade ELASTOSIL® M 4641 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 4641 A/B



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

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