

SILISIL RTV MF-Ultra 70 Addition-Crosslinking

Description:

SILISIL RTV MF-Ultra 70 is a pourable, room temperature vulcanizing 2-component additive silicone (RTV 2) with a mixing ratio of 1:10.

The product offers the following advantages:

- High hardness (\approx Shore A 67) for robust shapes
- Very good chemical resistance to PU, epoxy and polyester resins
- High shape and dimensional stability
- Precise detail reproduction with minimal shrinkage
- Temperature resistant from -40 °C to $+200$ °C
- Excellent aging and abrasion resistance

Main areas of application:

- Mold making for technical and industrial components
- Molding with epoxy, polyurethane or polyester resins
- High-strength tool molds for special applications

Surface preparation:

The surfaces to be reproduced must be clean, dry, and dust-free. Ideally, work at room temperature (approx. 23 °C) to ensure consistent processing and curing times. A release agent should be applied before pouring epoxy, polyester, and polyurethane resins into silicone molds. For aggressive resins, application is recommended with each pour.

Mixture and application:

1. **Preparation:** Shake or stir both components (base and catalyst) well before use to ensure a homogeneous consistency.
2. **Mixing:** Weigh the base and catalyst precisely **by weight in a 1:10 ratio** (maximum tolerance ± 5 %). Mix the components thoroughly, carefully incorporating the mixture into the container walls and bottom.
3. **Venting:** For optimal results, it is recommended to vent the mixture under vacuum after mixing to remove any trapped air bubbles.
4. **Processing:** Pour the mixed silicone slowly, ideally from a height of about 30 cm, into the prepared mold to minimize air bubbles.
5. **Curing:** Vulcanization takes place at room temperature (23 °C). Demolding is possible after approximately 24 hours. Note that lower temperatures significantly extend the pot life and curing time, while higher temperatures shorten them.

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Technical data:

Color (base)	Blue
Color (catalyst)	White
Paint (mixture)	Blue
Viscosity (Base)	approx. 600 mPa·s (Brookfield)
Viscosity (catalyst)	approx. 140,000 mPa s (Brookfield)
Viscosity of the mixture	230,000 mPa·s (Brookfield)
Density (basic)	0.97 g/cm ³ (at 23 °C)
Density (catalyst)	1.28 g/cm ³ (at 23 °C)
Mixing ratio	1:10 by weight
Pot life (at 23 °C)	approximately 60 minutes
Demolding time (at 23 °C)	approximately 24 hours
Hardness (Shore A)	approx. 67 (according to ASTM D 2240)
Tear resistance	>7.0 N/mm ² (according to ASTM D 412)
Elongation at break	approximately 200 % (according to ASTM D 412)
Tear resistance	approx. 7 N/mm (according to ASTM D 624)
Temperature resistance	-40 °C to 200 °C

Packaging:

SILISIL RTV MF-Ultra 70 is available as standard in 0.5 kg + 5 kg and 2.5 kg + 25 kg containers. Other container sizes are available upon request.

Safety instructions:

Before use, please read the safety data sheet and observe the instructions for safe handling.

Important note:

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