

SILISIL RTV PC-Flex 20 Condensation-Crosslinking

Description:

SILISIL RTV PC-Flex 20 is a pourable, room temperature vulcanizing 2-component polycondensation-based silicone (RTV 2).

The product offers the following advantages:

- Medium Shore A hardness (approx. 30)
- Polymerization at room temperature (23 °C)
- High tensile strength and good mechanical properties
- Small dimensional change
- No bleeding required

Main areas of application:

- Production of series and prototype parts as well as duplications
- Use in mold and model making
- Suitable for ceramic stencil printing.

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.

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 100:5 ratio**. Mix the components thoroughly, making sure to incorporate the mixture into the container walls and bottom.
 - Less catalyst (3–4 %) reduces the dimensional change, but increases the curing time.
 - No more catalyst may be used.
3. **Processing:** Pour the mixed silicone slowly, ideally from a height of about 30 cm, into the prepared mold to minimize air bubbles.
4. **Curing:** Vulcanization takes place at room temperature (23 °C). Demolding is possible after approximately 18–24 hours. Note that lower temperatures significantly extend the pot life and curing time, while higher temperatures shorten them.

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Technical Data:

Paint (mixture)	White
Viscosity of the mixture	Approx. 60,000 mPa s (Brookfield)
Density of the mixture	1.26 g/cm ³ (at 23 °C)
Mixing ratio	100:5 by weight
Pot life (at 23 °C)	approximately 60 minutes
Demolding time (at 23 °C)	approximately 24 hours
Complete curing (at 23 °C)	approximately 72 hours
Hardness (Shore A)	approx. 30 (according to ASTM D 2240)
Tear resistance	>4.1 N/mm ² (according to ASTM D 412)
Elongation at break	approx. 320% (according to ASTM D 412)
Tear resistance	18 N/mm (according to ASTM D 624)
Temperature resistance	-40 °C to 200 °C

Packaging:

SILISIL RTV PC-Flex 20 is available as standard in 1 kg, 5 kg, 20 kg and 200 kg containers. Other container sizes are available upon request.

Safety instructions:

Before handling the product, read the safety data sheet and ensure that you have all the information required for safe use.

Important note:

This document contains information provided to the best of our knowledge and belief, based on the current state of our understanding. This information is for guidance only and does not constitute any obligation on our part, particularly in the event of an infringement of third-party rights through the use of our products. This information should be supplemented by preliminary testing to ensure the product's suitability for its intended purpose.