SILISIL RTV MF-Flex 20

Technical Data Sheet

1. DESCRIPTION

SILISIL RTV MF-Flex 20 is a pourable addition-crosslinking, two component silicone that vulcanizes at room temperature. It presents the following special features:

- Very good flow
- Fast and non-shrink cure at room temperature
- Low Shore A hardness
- High tear strength
- Excellent long-term stability of the mechanical characteristics of the hardened rubber
- Outstanding resistance to gypsums, common casting resins and coatings

2. MAIN AREAS OF APPLICATION

- Mould making
- Master model
- Sanitary ware
- Artificial stone
- Concrete moulding

3. MIXTURE AND APPLICATION

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.

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 **in a 1:1 ratio** (maximum tolerance ±5%). Mix the components thoroughly, carefully incorporating the mixture into the container walls and bottom.

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 3 hours.

4. IMPORTANT RECOMMENDATIONS

- Before handling the product, read the safety data sheet and make sure to get all the information required for safe use.
- The platinum catalyst is contained in the component catalyst. Catalyst and base components may only be used together if they have the same batch number.
- Before the casting of Epoxy, Polyester and PU resins on the silicone please apply a release agent. If the resin is aggressive, apply it before each casting to protect the silicone mold.
- Test the product in small scale quantity before extending the use in larger scale.
- Exact proportions 1:1 must be respected to guarantee the final characteristics of the product.
- It is recommended to use vacuum to eliminate any air bubbles.
- If necessary, use compressed air to facilitate separation. Do not use any tools to force the separation of the model from the mold.
- The working time WT (see table below), also known as “pot life”, is the recommended time for mixing/vacuuming prior to casting.
- To increase the working/setting time of RTV2 silicones, you may add SILISIL Delayer PA to the catalyst. For more information, please refer to SILISIL Delayer PA TDS or consult your technical contact at SILITECH AG.
- The working time and setting time are reduced if the temperature exceeds 23°C (e.g., if the temperature is 40°C, the working time and setting time are approximately cut in half). If the temperature is less than 23°C, the working time and setting time increase considerably.
- Close the bottles after use, do not change the caps or lids between the base and catalyst.

5. TECHNICAL DATA

Component Catalyst (uncured)

Properties	Specifications	Analytical Method
Color	White	Visual
Density (23 °C)	1,13 g/cc	

Component Base (uncured)

Properties	Specifications	Analytical Method
Color	Blue	Visual
Density (23 °C)	1,13 g/cc	

Base + Catalyst (cured components)

Properties	Specifications	Analytical Method
Color	Blue	Visual
Viscosity of pre-catalyzation mixture	4500 cP	Internal Method (Brookfield)
Mixing ratio	1:1	
Density (23 °C)	1,13 g/cc	
Working time/Pot life (23 °C)	15’	Internal Method (Brookfield)
Setting time (23 °C)	90’	
Shore A hardness (after 24 hours, 23 °C)	22 shA	ASTM D2240
Fully vulcanized (23 °C)	24 hours	
Tensile Strength (23 °C)	4,5 N/mm^2	ASTM D412
Elongation at break (23 °C)	480 %	ASTM D412
Tear strength Die B (23 °C)	20 N/mm^2	ASTM D624

6. PACKAGING

SILISIL RTV MF-Flex 20 is available as standard in 1kg + 1kg, 5kg + 5kg and 25kg + 25kg containers. Other container sizes are available upon request

7. SAFETY INSTRUCTIONS

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

8. 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.