

# SILISIL RTV PC-Soft 10

## Technical Data Sheet

---

### 1. DESCRIPTION

---

SILISIL RTV PC-Soft 10 is a poly-condensation curing two component silicone that vulcanizes at room temperature. It presents the following special features:

- Low Shore A hardness (approx. 10)
  - High tear strength
  - Low dimensional variation
- 

### 2. MAIN AREAS OF APPLICATION

---

- Industrial (low dimensional variation, high mechanical resistance, long life of the mold)
- 

### 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.

Before the casting of Epoxy, Polyester and PU resins on the silicone, please apply a release agent to protect the silicone mould. If the resin is aggressive, apply it before each casting. Use either SILISIL PC-Curing Agent NF, SILISIL PC-Curing Agent PU or SILISIL PC-Curing Agent Standard as a catalyst depending on the use case and desired results.

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 100:5 ratio**. DO NOT exceed the recommended ratio for the curing agent. You can use less of the catalyst (3-4%) than the recommended ratio, in this case the dimensional change will be lower but setting time will increase. 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 18 - 24 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.
  - Test the product in small scale quantity before extending the use in larger scale.
  - Exact proportions must be respected to guarantee the final characteristics of the product.
  - Condensation bases accelerate naturally near the expiration date. In this case, it is recommended to use less catalyst so that the product acquires flexibility.
  - 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

### Base + SILISIL PC-Curing Agent NF (cured)

Properties	Specifications	Analytical Method
Viscosity	<50000 cP	
Density (23 °C)	1,17 g/cc	
Mixing ratio	100:5	
Working time/Pot life (23 °C)	60'	Internal Method (Brookfield)
Setting time (23 °C)	24 hours	
Shore A hardness (after 24 hours, 23 °C)	11 shA	ASTM D2240
Shore A hardness (after 72 hours, 23 °C)	15 shA	ASTM D2240
Tensile Strength (23 °C)	2,5 N/mm <sup>2</sup>	ASTM D412
Elongation at break (23 °C)	450 %	ASTM D412
Tear strength Die B (23 °C)	16 N/mm <sup>2</sup>	ASTM D624
Dimensional variation (48 hours)	0,31 %	
Dimensional variation (7 days)	0,39 %	

### Base + SILISIL PC-Curing Agent Standard (cured)

Properties	Specifications	Analytical Method
Viscosity	<50000 cP	
Density (23 °C)	1,17 g/cc	
Mixing ratio	100:5	
Working time/Pot life (23 °C)	60'	Internal Method (Brookfield)
Setting time (23 °C)	24 hours	
Shore A hardness (after 24 hours, 23 °C)	9 shA	ASTM D2240
Shore A hardness (after 72 hours, 23 °C)	12 shA	ASTM D2240
Tensile Strength (23 °C)	3 N/mm <sup>2</sup>	ASTM D412
Elongation at break (23 °C)	650 %	ASTM D412
Tear strength Die B (23 °C)	20 N/mm <sup>2</sup>	ASTM D624
Dimensional variation (48 hours)	0,48 %	
Dimensional variation (7 days)	0,65 %	

**Base + SILISIL PC-Curing Agent PU (cured)**

<b>Properties</b>	<b>Specifications</b>	<b>Analytical Method</b>
Viscosity	<50000 cP	
Density (23 °C)	1,17 g/cc	
Mixing ratio	100:5	
Working time/Pot life (23 °C)	60'	Internal Method (Brookfield)
Setting time (23 °C)	24 hours	
Shore A hardness (after 24 hours, 23 °C)	8 shA	ASTM D2240
Shore A hardness (after 72 hours, 23 °C)	12 shA	ASTM D2240
Tensile Strength (23 °C)	3,2 N/mm <sup>2</sup>	ASTM D412
Elongation at break (23 °C)	590 %	ASTM D412
Tear strength Die B (23 °C)	20 N/mm <sup>2</sup>	ASTM D624
Dimensional variation (48 hours)	0,40 %	
Dimensional variation (7 days)	0,91 %	

---

## 6. PACKAGING

---

**Base**

SILISIL RTV PC-Soft 10 is available as standard in 1 kg, 5 kg, 20 kg, 50 kg, and 200 kg containers. Other container sizes are available upon request

**Catalysts**

SILISIL PC-Curing Agent NF, SILISIL PC-Curing Agent Standard, and SILISIL PC-Curing Agent PU are available as standard in 50 g, 250 g, 1 kg, 2,5 kg, and 10 kg 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.

---