

Technical Data Sheet

Calsil RTV PA 28 TG

Brand	Calsil
Market	Machinery & Equipment
Product	Calsil RTV PA 28 TG A+B

1. Product description

CALSIL® RTV PA 28 TG is a two component silicone elastomer which cures at room temperature by a poly-addition reaction. This reaction can be accelerated by heat.
Used in the reproductions of wax, plaster, resins models.

2. Benefits

- Easy processing and curing
- Outstanding tensile and tear strength
- Low linear shrinkage (when cross-linked at room temperature)

Typical Properties (not for sales specifications, please contact us prior to writing sales specs)

Proprieties	Unit	Values
Chemical characterization		Addition cured RTV-2
Odour		Odourless
Solubility		Not mixable in water, dispersible in most of solvents
Aspect Part A/B		Viscous fluid
Colour Part A		White
Colour Part B		White ou Pink
Mix Ratio (A : B)		100:10
Viscosity Part A	mPa.s	20 000
Viscosity Part B	mPa.s	2 000
Mixed viscosity	mPa.s	16 000
Working time	Minutes	45 ÷ 60
Setting time	Hours	4

Proprieties of the cross linked product	Unit	Values
Hardness 24H	Shore A	28
Density	g/cm ³	1.15
Elongation	%	400 ÷ 500
Tensile Strength	MPa	4.5
Tear Strength	KN/m	22
Shrinkage after 24H	%	< 0.1

3. How to use

- **Remix each of the two components (part A and B) every time before using.**

- **Mixing of the two components:**

Add 100 parts of part A to 10 parts of part B. The two components may be intimately mixed either by hand or using a low-speed electric or pneumatic mixer to minimize the introduction of air into the mixture.

- **Degassing:**

After mixing base and catalyst, it's recommended to eliminate entrapped air. If the mixing is one with the help of a machine and a static mixer, both parts are degassed before mixing. Calsil® RTV PA 28 A&B is degassed under a vacuum of 30 to 50 mbar. The degassing of the mixed product or of the two separated parts occurs under a vacuum of 30 to 50 mbar. Under vacuum, the product expands 3 to 4 times its initial volume and forms bubbles in its surface. These bubbles will disappear gradually and the mixture will sink back down to its initial volume within 5 minutes. Release the vacuum and repeat the operation a few minutes later.

Remark: release the vacuum several times improves the degassing. For easier degassing only fill a recipient to 1/3 of its height. The product can be casted by gravity or under pressure.

- **Cross linking:**

The best curing conditions are at 23°C. when using the products at higher temperatures, the pot life is shorter and the setting rate faster. As opposed to this, lower temperature increase the pot life and decrease the setting rate.

Room temperature curing assures the lowest possible shrinkage, if accelerated cure is desired, mild heat should be preferred. To minimize shrinkage the elastomer should be cured at maximum temperature of 60°C. higher temperatures might cause higher shrinkage.

At 23°C, the cured silicone can be demolded after the time indicated as "demolding time".

- **Other recommendations:**

Be aware that contact with certain materials can inhibit the curing of this RTV:

- Natural rubbers vulcanized with Sulphur
- Poly-condensation RTV catalyzed with metals salts
- PVC stabilizing agents
- Amine cured epoxies
- Sulphur containing clays

In case of doubts, it is recommended to test the substrate by applying a small quantity of the mixed silicone on a restricted area. Take note that cross contaminations due to improperly cleaned tools or devices in the most frequent cause of inhibition.

CAUTION ; Only components A and B with the same batch number may be processed together. The platinum catalyst is contained in component A.

4. Handling

This document does not contain safety precautions. Before handling this material, please read the Material Safety Data Sheet, check the label on the container, and conform to the safety, physical and hazard guidelines and precautions. The Material Safety Data Sheet is available from your nearest CALDIC office.

5. Storage and Shelf Life

The product, when stored under appropriate conditions, is stable and usable for 12 months. Beyond this date, Caldic no longer guarantees that the products meet sales specifications. We suggest to keep the products in their original packaging, well-closed at a temperature between +7°C and +27°C, in well-aired places. Close always the caps after use. Do not reverse the caps. Mixing it with a clean shaker before use.

6. Packaging

CALSIL[®] RTV PA 28 TG Part A is supplied in kg 20 pails and kg 5 cans.
CALSIL[®] RTV PA 28 TG Part B is supplied bottle kg. 1 and bottle kg 0,500.

7. Restrictions


This ingredient is solely proposed in the above listed applications.
It is not suitable to be used in medical, human injection, pharmaceutical applications.

8. Limited Warranty PLEASE READ CAREFULLY

- The information herein is offered in good faith. It is believed to be accurate at the time of shipment.
- It should not be used as a substitute for the customer's test, the customer bears the responsibility to ensure that the product matches the intended application is safe and achieves the desired benefits.
- The product warranty is limited to the refund value of the purchase or the replacement only when it is demonstrated that the product is out of the agreed sales specifications.
- CALSIL[™] is a registered trademark of CALDIC BV. All rights reserved.

For more information, please contact our nearest office

Caldic B.V.
info@caldic.com
www.caldic.com

Phone +31 (0)10 413 64 20
 Follow our latest updates on LinkedIn