Technical Data Sheet

CALSIL
Machinery & Equipment

RTV PA10T A & B

1. Product Description:

It's a pourable bi-component RTV-2 silicone rubber, vulcanizing at room temperature with a poly-addition process without shrinkage.

2. Key Properties

- Perfect replica
- Highly resistant in all circumstances
- Thermo-stabòle

3. Benefits

- High mechanical properties
- High eleasticity

4. Applications

It used in the field of pad-printing.

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

Physical Properties	Units	Values
Chemical characterization		Addition cured RTV-2
Aspect part A		Viscous liquid/ white
Aspect part B		Fluid / transparent
Viscosity Part A	mPa.s	30000
Viscosity Part B	mPa.s	200
Odour		odorless
Solubility		Not mixable in water, dispersible in most of solvents
Curing Properties		
Mix Ratio		100:10
Working time	Minutes	60 ÷ 90
Setting time	Hours	16 ÷ 24
Properties of the cross linked product:		
Hardness	Shore A	10 ± 2
Specific gravity	g/cm^3	1.20 ± 0.02
Elongation	%	600 ÷ 700
Tensile strength	MPa	3.0 ± 0.3
Tear strength	KN/m	12.0 ± 2.0
Shrinkage (after 24h)	%	<0.1

6. Safety Handling Information

Product Information relative to security, physical and health hazards are in the Material Safety Data Sheet (MSDS) supplied with the product or upon request.

7. How to use

Make sure that the model to duplicate is perfectly clean and dry. Before using, shake well the bottles of part A and B. Mix exactly 100 parts of A and 10 parts of B. if the proportions aren't exact, the curing times and the final properties can be differente.
Mix about a minute until a homogeneous color is obtained, then pour the mixture. To reduce air bubbles, we suggest a vacuum de-airing treatment before pouring the silicone rubber, compatible with the curing times. Before casting, vacuum degassing (20-30 mm of mercury) is recommended.
Release the vacuum several times. To achieve this, the container should allow an expansion of the fluid at about 3-5 times the initial level. Avoid prolonged degassing too, so as not to volatilize certain components required for curing. In the case of a high thickness coating operation, the casting must be made at the lowest point in the volume to be filled; this avoids forming and including air bubbles in the volume.
The temperature influences the curing speed. We recommend to work in an isothermal place at 23°C. Higher temperatures accelerate the curing times, lower temperatures reduce them.

At 23°c and 50% of RH the cured silicone can be demoulded after 16-24 hours. In order to reach the best performance of the moulds, we suggest to wait for 24 hours before using them.

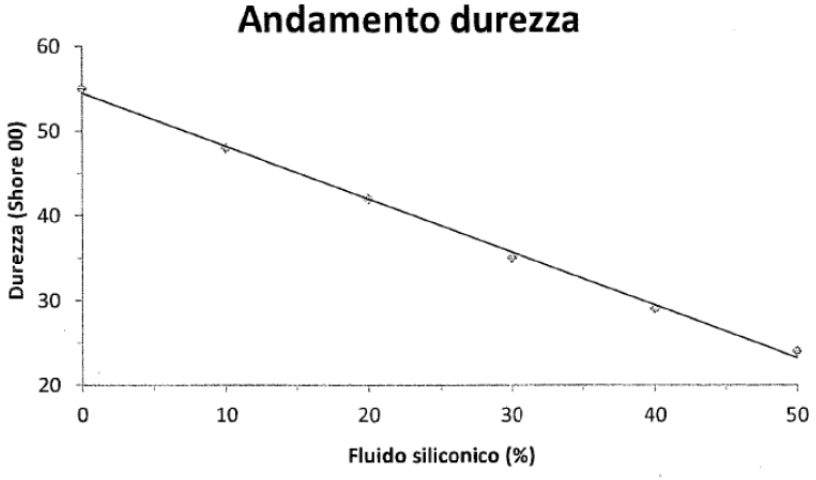
Other recommendations:

- Some inhibitions to vulcanization process may occur when the silicone rubber get in contact with amines, plastilines, metal salts, sulphided, tin catalysts and poly-condensation silicone rubbers. To avoid any inhibition problems, we recommend a preliminary test for the compatibility of the silicone on the material to duplicate.

8. Dilutions

the hardness of calsil RTV PA 10T decrease by adding silicone fluid and follows the table progress:

RTV PA 10T/A	RTV PA 10T/B	Silicone Fluid	Shore A	Shore 00
100	10	0	12	55
100	10	10	5	48
100	10	20	2	42
100	10	30	0	35
100	10	40	0	29
100	10	50	0	24



9. Storage and Shelf Life

The product, when stored under appropriate conditions, is stable and usable for 12 months. Beyond this date, we 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. Do not reverse the caps and put always the counter-caps in their packaging.

10. Packaging

CALSIL® RTV PA 10T/A (based) is available pail kg 20.
CALSIL® RTV PA 10T/B (catalyst) is available bottle kg. 1.

11. Restrictions

This ingredient is solely proposed in industrial applications. It is not suitable to be used in cosmetic, medical, human injection, pharmaceutical or food applications.

12. 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 demonstrated that the product is out of the agreed sales specifications.
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For more information, please contact our nearest office

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