

RHODORSIL® RTV 3527 A & B

Description

RHODORSIL RTV 3527 A & B is a two-component silicone elastomer which cures at room temperature by a polyaddition reaction.

When the A and B liquid components are thoroughly mixed in, 1:1 ratio the product will cure to an elastomer at room temperature.

Applications

- Production of printing rollers.
- Mouldmaking..
- Production of orthopaedic pieces.

Advantages

- Ease of curing : RHODORSIL RTV 3527 A & B crosslinks at temperatures above 20°C even in the complete absence of air or humidity.
- Ease of processing since components A&B to be mixed (100 parts and 100 parts) are both free flowing.
- Temperature resistant.

Characteristics

1. Characteristics of the non-cured product

	Properties	
	RTV 3527 A	RTV 3527 B
Appearance	Viscous liquid	Viscous liquid
Colour	Whitish	Whitish
Density (at 23°C, g/cm ³)	1.20	1.20
Viscosity (at 23°C, mPa.s)	7.000	7.000



2. Polymerization

RHODORSIL [®] RTV 3527 A	100 parts
RHODORSIL [®] RTV 3527 B	100 parts

Properties RTV 3527 A & B

Pot life
(at 23°C, minutes approx) **25**

Time after wich article can be handled
(at 23 °C , HOURS) **1**

Remark :
**Higher temperatures reduce the times, lower temperatures extend the times.*

3. Characteristics of the cross-linked product

Properties RTV 3527 A & B

Shore A hardness
approx after 96h/4days **28**

Tensile Strength at break
Mpa **5**

Elongation at break
% **400**

Tear Strength
KN/m **15**

Liner Shrinkage
% **0,1**



Processing

Mixing

The A and B parts tend to separate the filler. Before using, stir thoroughly both the part in order to re-homogenise it.

Add 100 parts of **RHODORSIL RTV 3527 B** to 100 parts of **RHODORSIL RTV 3527 A** .
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 is recommended to eliminate entrapped air. If the processing is done with the help of a machine both parts are degassed before mixing. **RTV 3527** is degassed under a vacuum of 30 to 50 mbar. Under vacuum pressure, the product will expand 3 at 4 times its initial volume and forms bubbles on 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. Release the vacuum several times improves the degassing. For easier degassing only fill a recipient to 1/3 of its height.

Cross-linking

At 23 °C, **RTV 3527** can be demoulded after 24 h. In order to achieve the best possible performance levels; it is preferable to wait 24 h before using them. Room temperature curing assures the lowest possible shrinkage, if accelerated cure is desired, mild heat should be preferred.

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

- *Natural rubbers vulcanized with sulphur*
- *Polycondensation RTV catalysed with metal salts*
- *PVC stabilizing agents*
- *Amine cured epoxies*
- *Sulphur containing clays*

Packaging

Storage and shelf life

The **RHODORSIL[®] RTV 3527 A & B** is delivered in 25 kgs drums.

When stored in its original unopened packaging, at a temperature of between – 5°C and + 30°C, the **RHODORSIL[®] RTV 3527 A & B** may be stored for up to 12 months from the date of manufacture clearly marked on the packaging.

Beyond this date, Rhodia Silcea SBU silicones Spa no longer guarantees the conformity of the products with the sales specifications.

Safety

Ensure that containers are properly closed after use in order to avoid any contamination of the contents.