

# RTV 4511 A/B

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## Description

RTV 4511 A&B is a two component silicone elastomer which cures at room temperature by a polyaddition reaction. The polymerisation can be accelerated by heat.

The silicone material is delivered as two low viscous liquid components, which once mixed and cured, transform into an elastic and resistant material. Polymerisation occurs without formation of heat.

## Examples of applications

- Heel cushions.
- Toe separators.
- Liners for limb prostheses.

## Advantages

- Very high stretch ability.
- Sterilisable.
- Fast mixing and easy processing due to low viscosity.

## Characteristics

### 1. Characteristics of the non cured product

<i>Properties</i>	RTV 4511	
	A	B
<b>Contains</b>	<b>Pt</b>	<b>SiH</b>
<b>Appearance</b>	Low viscous liquid	
<b>Colour</b>	Translucent	Translucent (*)
<b>Density</b> (At 23°C, [g/cm <sup>3</sup> ], approx.)	1.08	
<b>Viscosity</b> (At 23°C, [mPa·s], approx.)	1000	1400

(\*) also available in blue

### 2. Polymerisation

<i>Properties</i>	RTV 4511 A&B
<b>Mixing Ratio A : B</b> (parts by weight)	1 : 1
<b>Potlife</b> (At 23°C, [min], approx.)	25
<b>Demoulding time</b> (At 23°C, [min], approx.)	35

### 3. Characteristics of the cured product

Curing conditions: 60 minutes at 50°C

<i>Properties</i>	RTV 4511 A&B
<b>Hardness Shore 00</b> , (DIN 53505 approx.)	11

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Ces informations ne doivent pas se substituer aux essais préliminaires indispensables pour s'assurer de l'adéquation du produit à chaque usage envisagé. Il appartient aux utilisateurs de s'assurer du respect de la Législation locale et d'obtenir les homologations et autorisations éventuellement nécessaires.

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## Processing

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

### 1. Mixing the two components

The components A and B are mixed by weight in the above indicated ratio. The mixing can be carried out either by hand or by using a low-speed electric or pneumatic mixer to minimise the introduction of air and to avoid any temperature increase.

It is also possible to use a special mixing and dispensing machine for the two silicone components. Further information is available upon request.

### 2. Degassing

The mixture should be degassed preferably at 0 to 0.1 mbar to eliminate any entrapped air. If a dispensing machine is used, the two components are degassed separately prior to mixing.

The silicone mixture expands to 2 to 4 times of its initial volume and bubbles rise to the surface. Wait a few minutes to complete the degassing and then flash the vacuum. The silicone is ready for pouring, either by gravity or under low pressure.

### 3. Polymerisation

The system polymerises at 23°C. The curing may be slowed down at lower temperature or accelerated by heat.

Contact with certain materials can inhibit the crosslinking. See list below:

- Natural rubbers vulcanised with sulphur.
- RTV 2 silicone elastomers catalysed with metal salts, e.g. tin-compounds.
- PVC stabilised with tin salts and additives.
- Epoxy resins catalysed with amines.

In case of doubts, it is recommended to test the substrate by applying a small quantity of the mixed silicone on a restricted area.

## Storage and shelf life

When stored in its original packaging at a temperature of between -10°C and + 30°C, RTV 4511 A&B may be stored for up to 6 months from its date of manufacture.

Comply with the storage instructions and expiry date marked on the packaging.

Beyond this date, Bluestar Silicones no longer guarantees that the product meets the sales specifications.

## Biocompatibility and Toxicity

Biocompatibility testing addresses the categories of evaluation for cytotoxicity, skin sensitization and skin irritation specified in USP Class VI and / or ISO 10993 for device use of less than 30 days duration.

## Safety

Please consult the Safety Data Sheets of RTV 4511 A&B.

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