

SILBIONE RTV 4528 A&B

Description **SILBIONE RTV 4528 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.

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

Typical properties

1. Characteristics of the non cured product

Properties	SILBIONE RTV 4528	
	A	B
Contains	Pt	SiH
Appearance	Low viscous liquid	
Colour	Translucent	
Density (At 23°C, [g/cm ³], approx.)	1.10	1.08
Viscosity (At 23°C, [mPa·s], approx.)	5000	3200

2. Polymerisation

Properties	SILBIONE RTV 4528 A&B
Mixing Ratio A : B (parts by weight)	1 : 1
Potlife (At 23°C, [min], approx.)	70

3. Characteristics of the cured product

Curing conditions: 30 minutes at 80°C

Properties	SILBIONE RTV 4528 A&B
Hardness Shore 00 (DIN 53505, approx.)	28
Tensile Strength (DIN 53504, [N/mm ²], approx.)	2.0
Elongation (DIN 53504, [%], approx.)	950
Tear Strength (DIN 53515, [N/mm], approx.)	3.0

Please note: The typical properties are not intended for use in preparing specifications. Please contact our local Sales Department for assistance in writing specifications.

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Instruction of use	<p><u>Remix each of the two components (part A and B) every time before using.</u></p>
	<p>1. Mixing the two components</p>
	<p>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.</p> <p>It is also possible to use a special mixing and dispensing machine for the two silicone components. Further information is available upon request.</p>
	<p>2. Degassing</p>
	<p>The mixture should be degassed preferably at 30 to 50 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 3 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.</p> <p><i>Note: Flashing the vacuum once or twice accelerates the degassing. It is recommended to use a container with a high diameter / height ratio.</i></p>
	<p>3. Polymerisation</p>
	<p>The system polymerises at 23°C. The curing may be slowed down at lower temperature or accelerated by heat.</p> <p>Contact with certain materials can inhibit the crosslinking. See list below:</p> <ul style="list-style-type: none"> • 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. <p>In case of doubts, it is recommended to test the substrate by applying a small quantity of the mixed silicone on a restricted area.</p>
Regulation	<p>Extensive toxicology testing on SILBIONE® products has demonstrated their adequate biocompatibility and suitability for the recommended applications. SILBIONE RTV 4528 A and SILBIONE RTV 4528 B satisfies regulatory requirement in several countries and complies with a number of medical and pharmaceutical regulations. Contact Elkem Silicones for more detailed information.</p>
Limitations	<p>Please consult your local ELKEM SILICONES sales office.</p>
Packaging	<ul style="list-style-type: none"> • SILBIONE RTV 4528 A is available in <ul style="list-style-type: none"> ○ Pail of 25 KG (55.13 LB) • SILBIONE RTV 4528 B is available in <ul style="list-style-type: none"> ○ Pail of 25 KG (55.13 LB)
Storage and shelf life	<p>When stored in its original packaging:</p> <p>SILBIONE RTV 4528 A may be stored at temperatures between -10°C / 14°F and 30°C / 86°F for up to 6 months from its date of manufacturing.</p> <p>SILBIONE RTV 4528 B may be stored at temperatures between -10°C / 14°F and 30°C / 86°F for up to 6 months from its date of manufacturing.</p> <p>Comply with the storage instructions and expiration date marked on the packaging. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.</p>
Safety	<p>Please consult the Safety Data Sheet of: SILBIONE RTV 4528 A and SILBIONE RTV 4528 B</p>

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