

SILBIONE RTV 4510 A U1

Description SILBIONE™ RTV 4510 A&B is a two-component silicone elastomer which cures at room temperature by a polyaddition reaction. The polymerization 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. Polymerization 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**

| <i>Properties</i> | SILBIONE RTV 4510 | |
|---|--------------------------|------------|
| | A | B |
| Contains | Pt | SiH |
| Appearance | Low viscous liquid | |
| Color | Translucent | |
| Density (At 23°C, g/cm ³ , approx.) | 1.08 | |
| Viscosity (At 23°C, mPa·s, approx.) | 1200 | 1400 |

2. Polymerization

| <i>Properties</i> | SILBIONE RTV 4510 A&B |
|---|----------------------------------|
| Mixing Ratio A : B (parts by weight) | 1 : 1 |
| Potlife (At 23°C, minutes, approx.) | 30 |
| Demolding time (At 23°C, minutes, approx.) | 60 |

3. Characteristics of the cured product (Curing conditions: 60 minutes at 80°C)

| <i>Properties</i> | SILBIONE RTV 4510 A&B |
|---|----------------------------------|
| Hardness Shore 00 (DIN 53505, approx.) | 15 |

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

Instruction of use 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 minimize the introduction of air and to avoid any temperature increase.

SILBIONE RTV 4510 A U1

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 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 release the vacuum. The silicone is ready for pouring, either by gravity or under low pressure.

Note: Release the vacuum once or twice accelerates the degassing. It is recommended to use a container with a high diameter / height ratio.

3. Polymerization

The system polymerizes 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 vulcanized with Sulphur.
- RTV 2 silicone elastomers catalyzed with metal salts, e.g. tin-compounds.
- PVC stabilized with tin salts and additives. - Epoxy resins catalyzed 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.

| | |
|-------------------------------|--|
| Regulation | Extensive toxicology testing on SILBIONE® products has demonstrated their adequate biocompatibility and suitability for the recommended applications. SILBIONE RTV 4510 A U1 and SILBIONE RTV 4510 B U1 satisfies regulatory requirement in several countries and complies with a number of medical and pharmaceutical regulations. Contact Elkem Silicones for more detailed information. |
| Limitations | Silbione™ silicone products may be used for healthcare applications in accordance with Elkem's healthcare product guidelines. Elkem Silicones supports the sales of these Silbione™ silicone products to customers involved in manufacturing and assembling approved medical devices for less than 30-day implantation. The purchaser has the sole responsibility to select a particular Silbione® silicones product and determine its application suitability. The purchaser also has the sole responsibility to comply with all applicable statutory, regulatory and industry requirements and standards for compatibility, extractability, testing, safety, efficacy, and labeling. |
| Packaging | Please consult your local ELKEM SILICONES sales office. |
| Storage and shelf life | When stored in its original packaging: SILBIONE RTV 4510 A U1 may be stored for up to 6 months from its date of manufacturing. SILBIONE RTV 4510 B U1 may be stored for up to 6 months from its date of manufacturing. 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. |
| Safety | Please consult the Safety Data Sheet of: SILBIONE RTV 4510 A U1 and SILBIONE RTV 4510 B U1 |

Visit our website www.elkem.com/silicones/

Warning to the users

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and is in no way binding, particularly as regards infringement of or prejudice to third party rights through the use of our products. ELKEM SILICONES guarantees that its products comply with its sales specifications. This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for given use. Determination of the suitability of product for the uses and applications contemplated by users and others shall be the sole responsibility of users. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorisations. Users are requested to check that they are in possession of the latest version of this document and ELKEM SILICONES is at their disposal to supply any additional information.