

# SILBIONE<sup>®</sup>

## RT GEL 4717 A & B

### Soft Skin Adhesive Gel

**Description** **SILBIONE RT GEL 4717 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 gel. Polymerisation occurs without formation of heat.

**Examples of applications**

- Adhesive wound dressings
- Adhesive sheets for scar treatment

**Advantages**

- Very good adhesion on dry skin
- No adhesion on moist wounds
- Proven biocompatibility
- No free oil

**Characteristics** **1. Characteristics of the non cured product**

<i>Properties</i>	<b>SILBIONE RT GEL 4717</b>	
	<b>A</b>	<b>B</b>
<b>Contains</b>	<b>Pt</b>	<b>SiH</b>
<b>Appearance</b>	Viscous liquid	
<b>Colour</b>	Transparent	
<b>Density</b> (At 23 °C, g/cm <sup>3</sup> , approx.)	0.98	
<b>Viscosity</b> (At 23 °C, mPa·s, approx.)	60000	

**2. Polymerisation**

<i>Properties</i>	<b>SILBIONE RT GEL 4717 A&amp;B</b>
<b>Mixing Ratio A : B</b> (parts by weight)	100 : 100
<b>Working Time</b> (At 23°C, min, approx.)	120
<b>Mixing Viscosity</b> (At 23°C, mPa·s, approx.)	60000

**SILBIONE® RT GEL 4717 A & B****Characteristics**  
(cont')**3. Characteristics of the cured product**

Curing conditions: 60 minutes at 120 °C

<i>Properties</i>	<b>SILBIONE RT GEL 4717 A&amp;B</b>
<b>Penetration</b> <i>Hollow cone (62.5 g), DIN ISO 2137, mm/10, approx.</i>	170
<b>Probe Tack</b> <i>Steel probe, 0.25 mm layer, mJ/cm<sup>2</sup>, approx.</i>	9.0

**Processing****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 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.

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

**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.

**Packaging**

**SILBIONE RT GEL 4717 A&B** is available in 25 kg pails and 200 kg drums.

**Storage and shelf life**

When stored in their original packaging at a temperature of between -10°C and +30°C, **SILBIONE RT GEL 4717 A&B** may be stored for up to 12 months from their 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 products meet the sales specifications.

# SILBIONE® RT GEL 4717 A & B

**Biocompatibility and Toxicity** After curing performed according to the conditions described above, **SILBIONE RT GEL 4717 A&B** complies with a number of regulations for Medical Devices.

Contact Bluestar Silicones for more detailed information.

**Safety** Please consult the Safety Data Sheets of **SILBIONE RT GEL 4717 A&B**.

**Limitations** Silbione® silicone products may be used for healthcare applications in accordance with Bluestar's healthcare product guidelines. Bluestar 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.

Bioburden testing, ie measure of the total number of viable microorganisms (total microbial count), for example prior to sterilization of the final medical device, is not provided for Silbione RTGel products. Should your application request bioburden testing for the silicone raw material, please contact your local Bluestar Silicones Sales Representative to discuss Bluestar Silicone's Silbione HC2 product range.

Visit our website [www.bluestarsilicones.com](http://www.bluestarsilicones.com)

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