

Silbione® RT Gel 4725 SLD A&B

October 2017

Light Weight Gel for Breast Care

Description Silbione® RT Gel 4725 SLD A&B is a two component silicone elastomer that crosslink at room temperature by polyaddition reaction. The polymerisation can be accelerated by heat.

The silicone materials are delivered as two low viscous liquid components, which once mixed and cured, transform into an elastic and resistant gel. Polymerisation occurs without the evolution of heat.

Examples of applications

- External light weight breast prosthesis

Advantages

- Good imitation of female breast tissue
- Low density and realistic touch of the final breast form
- Good adhesion to PU film
- Fast and easy processing due to low viscosity and 1:1 mixing ratio

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

	RT GEL 4725 SLD	
	A	B
Contains	Pt	SiH
Appearance	Low viscous	
Color	white	
Density approx. [g/cm³] at 23 °C	0,62	
Viscosity approx. [mPa·s] at 23 °C	10000	

2. Polymerisation

	RT GEL 4725 SLD
Mixing Ratio A : B parts by weight	1 : 1
Pot life approx. [min] at 50 °C (Gelnorm[□])	15
Mixing Viscosity approx. [mPa·s] at 23 °C	10000

3. Characteristics of the cured product

Properties	RT GEL 4725 SLD
Penetration approx. [mm/10], hollow cone (62,5 g) DIN ISO 2137	235
Density approx. [g/cm³] at 23 °C	0,63

Remarks: Due to the inherently weak structural network of silicone gels, mechanical properties cannot be measured on cured gels.

Processing**1. Preparation of the two components**

The silicone components contain a lightweight filler that gives the low density of the final gel. As this filler tends to rise to the surface it is necessary to stir up the components prior to use. The homogenised components are stable for up to one hour without the need for remixing. After one hour we advise that the components are remixed before use.

Alternatively, they can be kept in slowly stirred tanks. Using this method requires temperature control to avoid degrading the product and alterations of the pot life.

2. 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 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.

3. 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. The bubbles progressively disappear and the mixture returns to its initial volume after 5 to 10 minutes. 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.

4. Polymerization

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

Contact with certain materials can inhibit the cross linking. 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,
- Certain organic solvents, e.g. ketones, alcohols, ether etc.

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 4725 SLD A&B is delivered in drums of 100 kg.

Storage and shelf life

When stored in the original, unopened containers at a temperature between -10 °C and +30 °C), **Silbione® RT Gel 4725 SLD A&B** has a shelf life of 3 months from date of shipment from manufacture. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.

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Bio-compatibility and Toxicity

Extensive toxicology testing on **Silbione®** products has demonstrated their adequate biocompatibility and suitability for the recommended applications. Our evaluations according to EN/ISO 10993 have shown that **Silbione®** products are neither skin irritating nor skin sensitizing materials. They satisfy regulatory requirements in several countries, in particular those of class I medical devices as in 93/42/CEE European Directive, or those of US Pharmacopeia class VI. Toxicological summaries, statements and specific regulatory status are available upon request from your **Elkem Silicones** contact.

Safety

Please consult the Safety Data Sheet of **Silbione® RT Gel 4725 SLD A&B**.

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