

Silbione® MED ADH 4100 RTV

October 2017

High Strength Adhesive

Description **Silbione® MED ADH 4100 RTV** is a single component silicone adhesive designed for medical applications where a high strength elastic bond of silicone to silicone is needed. **Silbione® MED ADH 4100 RTV** cures at room temperature by exposure to ambient moisture to form a tough, elastic bond. During curing, acetic acid is released as a by-product. **Silbione® MED ADH 4100 RTV** contains no solvents or plasticizers and is designed to exhibit high thixotropy in thin sections, but self level in thick sections.

Applications

- Medical (<30 day implantable)
- Bonding silicone substrates to other silicone substrates

Advantages

- Very high bond strength
- Cures at room temperature
- Ready-to-use, easy to apply

Typical Properties

<u>Typical Properties as Supplied</u>	<u>Value</u>
• Appearance	Colorless, clear to translucent
• Tack Free Time, minutes	9
	Cured 72 hrs./ 25°C
• Durometer, Shore A	29
• Tensile Strength , psi (N/mm ²)	820(5.7)
• Elongation, %	780
• Tear Strength, ppi (N/mm)	85(14.9)
• Cohesive/ Adhesive Strength, ppi (N/mm)	30 (5.3)
• Specific Gravity	1.09
• Cytotoxicity	Non-toxic

Please note: The typical properties listed in this bulletin are not intended for use in preparing specifications for any particular application of **Silbione®** silicone materials. Please contact our Technical Service Department for assistance in writing specifications.

Instructions for use

Silbione® MED ADH 4100 RTV is a ready to use product. Surfaces to be bonded with adhesive should be pre-scrubbed thoroughly with a clean, soft sponge or soft-bristled brush in hot water-soap solution to remove possible surface contaminants. Do not use synthetic detergents or oil-based soaps. Rinse with copious amounts of hot water, then rinse with distilled water and dry thoroughly. Apply **Silbione® MED ADH 4100 RTV** adhesive and then mate the surfaces together with light pressure. A bond thickness of 0.010" minimum is recommended to achieve optimum strength. Partial cure is typically achieved in 20 minutes. Ultimate cure and optimal physical properties will be achieved after 24-120 hours at 25°C and ambient moisture.

Sterilization

Uncured **Silbione® MED ADH 4100 RTV** may be sterilized in the unopened tube by dry heating the sealed tube for 2 hours at 150°C. After the tube contents are dry heat sterilized, the tube exterior may be sterilized by ethylene oxide or steam autoclave. Gamma radiation is not suitable for sterilizing uncured adhesive. Cured adhesive may be sterilized by ethylene oxide, steam, dry heat or gamma radiation.

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Storage and shelf life	Silbione® MED ADH 4100 RTV when stored in its original unopened packaging, at a temperature of 30°C, may be stored for 730 days from the date of manufacture. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.
Safety	Please read the container labels for Silbione® MED ADH 4100 RTV or consult the Safety Data Sheet (SDS) before handling for safe use, physical and health hazard information.
Packaging	Silbione® HS Gel Flesh 5 CLR is available in 90 g and 18kg packages.

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 EUROPE	 NORTH AMERICA	 LATIN AMERICA	 ASIA PACIFIC
<p><i>Elkem Silicones France</i> 21 Avenue Georges Pompidou F69486 Lyon Cedex 03 FRANCE Tel. (33) 4 72 13 19 00 Fax (33) 4 72 13 19 88</p>	<p><i>Elkem Silicones USA</i> Two Tower Center Boulevard Suite 1601 East Brunswick, NJ 08816-1100 United States Tel. (1) 732 227 2060 Fax (1) 732 249 7000</p>	<p><i>Elkem Silicones Brazil Ltda.</i> Av. Maria Coelho Aguiar, 215 Bloco G -1º Andar 05804-902 - São Paulo - SP - Brazil Tel. (55) 11 3747 7887 Fax (55) 11 3741 7718</p>	<p><i>Elkem Silicones Hong Kong Trading Co. Ltd.</i> Unit C, 18/F Manulife Tower 169 Electric Road North Point-Hong Kong Tel. (852) 3106 8200 Fax (852) 2979 0241</p>
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