

Silbione® RTV 4420 QC A&B

October 2017

Addition Cure Silicone Elastomer

Description Silbione® RTV 4420 QC A&B is a two component silicone elastomer that cures at room temperature by polyaddition reaction, at a 1:1 ratio. It is designed to be used for molding in a variety of applications that require a faster cure, particularly those requiring realistic skin feel.

Applications

- Molding life like parts
- Skin like applications
- Special effects

Features

- Easy to use viscosity
- Excellent reproduction of details
- Excellent mechanical properties
- Low linear shrinkage
- No release of toxic substances during and after curing
- High resistance to inorganic chemicals and ultraviolet rays

Typical Properties

As Supplied	Test Method	Unit	SILBIONE® RTV 4420 QC A	SILBIONE® RTV 4420 QC B
	CTM			
• Appearance	TP 038		Low Viscosity Liquid	Low Viscosity Liquid
• Color	TP 038		Translucent	Transparent
• Viscosity		Cps	6,000	6,000
• Specific Gravity	I TP 013		1.1	1.1
• Mix Ratio				1:1
• Pot Life, 23°C	NM 128	minutes		3
• Cured	Test Method	Unit	Value	
	ASTM			
• Hardness ¹	D 2240	Shore A		20
• Tensile Strength	D 412	psi (N/mm ²)		580 (4)
• Elongation	D 412	%		500
• Tear Strength	D 624, Die B	ppi (N/mm)		86 (15)

¹ 6mm thick disk

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.

Processing Add 100 parts of Silbione® RTV 4420 QC A to 100 parts of Silbione® RTV 4420 QC B. Mix thoroughly in a clean vessel for one minute with gentle agitation to avoid air bubbles. Pour on pattern and demold after 15 minutes.
 WARNING: For mixing use only clean stainless steel or plastic vessels. Crosslinking of RTV vulcanising by polyaddition reaction may be inhibited by contact with:
 -heavy metal salts
 -amines
 -sulfur and derivatives
 -catalysts of epoxy resins

Curing Silbione® RTV 4420 QC A&B cures by polyaddition reaction of silicone reactive groups (-SiH) with silicone unsaturated polymers (such as -Si-CH=CH₂), summarized as:

$$\text{Pt} \\ \text{-SiH} + \text{-Si-CH=CH}_2 \text{ -> -Si-CH}_2\text{-CH}_2\text{-Si-}$$

Storage and shelf life Silbione® RTV 4420 QC A&B when stored in its original unopened packaging, at a temperature of 24°C (77°F), may be stored for 6 months from the date of manufacture. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.

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Safety

Please read the container labels for **Silbione® RTV 4420 QC A&B** or consult the Safety Data Sheet (SDS) before handling for safe use, physical and health hazard information. The SDS is not included with the product packaging, but can be obtained by contacting Elkem Silicones at 866-474-6342 or consult your Elkem Silicones representative. The curing agent for this material can generate a flammable gas upon contact with acidic, basic, or oxidizing materials. Precautions to avoid contact of this curing agent with these materials should be exercised.

Packaging

Silbione® RTV 4420 QC A&B is available in kits of 36 kg or 400 kg

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