DELIVERING
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Bluesil™ RTV 3611 QC A&B

October 2017

Addition Cure Silicone Elastomer

Description

Bluesil ™ RTV 3611 QC A/B is a two component, 10 Shore A durometer, room temperature, quick cure silicone elastomer designed for use in special effects and moldmaking applications, especially where flexibility and repetitive motion is required. It's superior physical properties and softness also allows use in non-skin contact cushioning applications.

Applications

- Animatronics; special effect skins
- Props for the film industry
- Theme park props and reproduction molds
- Cushioning applications

Features

- Translucent – can be pigmented
- Quick Cure
- Easy to use
- Excellent combination of softness and mechanical strength
- Low viscosity

Typical Properties

As Supplied	Test Method	Unit	BLUESIL™ RTV 3611 QC A	BLUESIL™ RTV 3611 QC B
	CTM			
• *Appearance*	TP 038		Low Viscosity Liquid	Low Viscosity Liquid
• *Color*	TP 038		Translucent	Transparent
• *Viscosity*		Cps	1,600	1,600
• *Specific Gravity*	TP 013		1.08	1.08
• *Mix Ratio*			1:1	
• *Pot Life*, 23°C	NM 128	minutes	10	
Cured	**Test Method**	**Unit**	**Value**	
	ASTM			
• *Hardness*[1]	D 2240	Shore A	11	
• *Tensile Strength*	D 412	psi (N/mm²)	>355 (3.0)	
• *Elongation*	D 412	%	>650	
• *Tear Strength*	D 624, Die B	ppi (N/mm)	60 (10)	

(1) 6mm thick disk

Please note: The typical properties listed in this bulletin are not indended for use in preparing specifications for any particular application of BLUESIL™ silicone matierals. Please contact our Technical Service Department for assistance in writing specifications.

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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 using a low-speed electric or pneumatic mixer to minimize 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. 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.

3. Polymerization

The system polymerizes at 23 °C. The curing may be slowed down by lowering the temperature and accelerated by adding heat.

4. Inhibition

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,
- 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.

Ancillary Products

Bluesil ™ PT Accelerator – to increase cure speed
Bluesil ™ Cure Rate Retarder – to slow cure speed
Bluesil ™ Thixo Additive 22646 – to increase viscosity and impart a non-flowing consistency
Bluesil ™ SP FX Deadener 10 – to impart a “flesh-like” feel by lowering silicone resilience

Storage and shelf life

Bluesil ™ RTV 3611 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.

Safety

Please consult the Safety Data Sheet for **Bluesil ™ RTV 3611 QC A/B.** The curing agent (Part B) 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

Bluesil™ RTV 3611 QC A/B is in multiple packages. Please consult with our team.

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