

Bluesil™ RTV 3611 A&B

October 2017

Addition Cure Silicone Elastomer

Description **Bluesil™ RTV 3611 A/B** is a two component, 10 durometer, room temperature curable silicone elastomer designed for use in special effects applications, especially where flexibility and repetitive motion is required. It's superior physical properties and softness also allows use in orthopaedic applications.

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

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

As Supplied	Test Method	Unit	BLUESIL™ RTV 3611 A	BLUESIL™ RTV 3611 B
• Appearance	CTM TP 038		Low Viscosity Liquid	Low Viscosity Liquid
• Color	TP 038		Translucent	Transparent
• Viscosity		Cps	2,500	2,500
• Specific Gravity	TP 013		1.1	1.1
• Mix Ratio				1:1
• Pot Life, 23°C	NM 128	minutes		90
• Cured	Test Method	Unit	Value	
	ASTM			
• Hardness¹	D 2240	Shore A	10	
• Tensile Strength	D 412	psi (N/mm ²)	430 (3.0)	
• Elongation	D 412	%	800	
• Tear Strength	D 624, Die B	ppi (N/mm)	80 (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 Bluesil™ silicone materials. Please contact our Technical Service Department for assistance in writing specifications.

Processing

1. Mixing the two components

The components A and B are mixed by weight in 1:1 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.

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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

For shelf life, please refer to the expiry date (to be used before « month-year ») marked clearly on the packaging.




Safety

Please consult the Safety Data Sheet for **Bluesil™ RTV 3611 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 A/B is available in multiple packages. Please consult with our team.

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