

# Bluesil™ RTV 3601 A&B

October 2017

## Addition Cure Silicone Elastomer

**Description** Bluesil™ RTV 3601 A/B is a two component, ShOO 11 durometer, room temperature curable silicone elastomer designed for use in special effects applications, especially where flexibility and repetitive motion is required.

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

### Typical Properties

As Supplied	Test Method	Unit	BLUESIL™ RTV 3601 A	BLUESIL™ RTV 3601 B
	CTM			
• Appearance	TP 038		Low Viscosity Liquid	Low Viscosity Liquid
• Color	TP 038		Translucent	Transparent
• Viscosity		Cps	1,900	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			
• Hardness <sup>1</sup>	D 2240	Shore OO	11	
• Tensile Strength	D 412	psi (N/mm <sup>2</sup> )	215 (1.5)	
• Elongation	D 412	%	500	
• Tear Strength	D 624, Die B	ppi (N/mm)	25 (4.7)	

(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 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.

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### 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 3601** 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 of **Bluesil™ RTV 3601**. 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 3601** is available in multiple packages. Please consult with our team.

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#### Warning to the users

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