



# BLUESIL™ V-205

## Silicone Protective Coating

**Description** **BLUESIL™ V-205** is a one component, black, addition cure silicone rubber compound. It is designed as a protective coating for electronic devices, and as a junction coating. It features primerless adhesion to inorganic substrates.

**Applications**

- Protective coating for light sensitive transistors and integrated circuits

### Characteristics

<b>TYPICAL PROPERTIES – AS SUPPLIED</b>		<b>CURE SCHEDULE</b>	
<u>One Component</u>		<b>Thick section</b> (25-50 mils)	
• <b>Color</b>	Black	1st Stage: 2 hrs. at 110°C (230°F)	
• <b>Consistency</b>	Thixotropic	2nd Stage: 1 hr. at 150°C (300°F)	
• <b>Viscosity</b> , cP. (mPa.s)	35,000	<b>Thin section</b> (<20 mils)	
• <b>Accelerated Shelf Life</b> , days, >7		15 to 60 minutes at 150°C (300°F)	
	7 days at 50°C (122°F)		
NOTE: Product must be kept refrigerated when not in use.			

<b>TYPICAL PROPERTIES OF CURED RUBBER.</b>		
Cured two hours at 110°C (230°F) plus 1 hour at 150°C (300°C)		
Property	Test Method	Value
• <b>Specific Gravity</b>		1.15
• <b>Hardness</b> , Shore A,	ASTM D2240	45
• <b>Temperature Range</b> , °C (°F)		-55 to 200 (-67 to 400)
• <b>Adhesion to Aluminum</b> , %, cured 1 hour at 150°C (300°F)		100

<b>TYPICAL ELECTRICAL PROPERTIES</b>		
Property	Test Method	Value
• <b>Dielectric Strength</b> , V/mil (kV/mm)	ASTM D149	500 (19.8)
• <b>Dielectric Constant</b> , 1kHz	ASTM D150	3.5
• <b>Dissipation Factor</b> , 1kHz	ASTM D150	0.002
• <b>Volume Resistivity</b> , ohm-cm	ASTM D257	3 x 10 <sup>15</sup>

**Please note:** The typical properties listed in this data sheet 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.

### Cure Inhibition

Some Bluestar Silicones Aerospace and Industrial products cure by addition polymerization using catalysts, which may be inhibited by other materials, found in some organic polymers, solvents or substrates. Always pretest product with substrates in order to insure system compatibility.

Especially troublesome materials are: Amine catalyzed epoxies, sulfur catalyzed rubbers such as neoprene latex SBR, vinyl coated wire, vinyl tapes, solder flux, tin catalyzed silicone rubbers, resinous woods, and some polyurethane elastomers.

**BLUESIL™ V-205****Mixing Equipment**

Unwaxed paper, stainless steel, glass, or high-density polyethylene or polypropylene containers, stainless steel spatulas, and metal power mixing equipment should be used to prevent product contamination. Do not use rubber or vinyl containers or mixing equipment. Power mixing equipment and spatulas should be wiped clean after every use and washed with a suitable solvent to maintain contaminant free mixing equipment and assure product quality.

**Packaging**

**BLUESIL™ V-205** is available in 454 gram containers.

**Storage and shelf life**

Shelf life of this material is eighteen (18) months from date of manufacture. Store material in original container in a cold, dry location at 40°F or below (refrigerate), except when a specific temperature is noted on the front of a product Technical Data Sheet. Keep all container lids tightly closed when not in use to prevent product contamination.

**Safety**

Please consult the Safety Data Sheet. This rubber system uses an organometallic tin catalyst, which may irritate or burn skin and eyes upon contact. If eye contact occurs, flushing with water for at least 15 minutes should relieve discomfort. If irritation or discomfort persists, obtain medical attention. To obtain a material safety data sheet for this product contact Bluestar Silicones at 866- 474-6342.

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Visit our website [www.bluestarsilicones.com](http://www.bluestarsilicones.com)

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