

**BLUESIL™ V-612**

Distributed By  
Freeman Manufacturing & Supply Co.  
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**Thixotropic Sealant**

**Description** **BLUESIL™ V-612** is a black, thixotropic, two component, addition cure aerospace sealant designed as a vane potting and damping material. **BLUESIL™ V-612** is qualified to Pratt & Whitney engine specification PWA 404-2 and Lockheed Spec. G40.1384.

**Applications** • Aircraft jet engine vane potting and damping

**Typical Properties**

<b>TYPICAL PROPERTIES - AS SUPPLIED</b>		<b>TYPICAL CATALYZED PROPERTIES</b>	
<u>Part A - Base Component</u>		Mixed at 24°C (75°F) and 50% R.H.	
• <b>Color</b>	Beige	• <b>Mix Ratio</b> , A:B (Parts by weight)	10:1
• <b>Consistency</b>	Thixotropic	• <b>Flow</b> , in. after 15 minutes	0.2
<u>Part B – Catalyst Component</u>		• <b>Pot Life</b> , hours	1.5
• <b>Color</b>	Black	• <b>Extrusion Rate</b> , g/min.	33
		• <b>Hardness</b> , Shore A, 16 hr. at room temp. <sup>(2)</sup>	45

**TYPICAL PROPERTIES OF CURED RUBBER,**

Cured 1 hr. 150°C (300°F) in mold; Post cured 1 hr. 204°C (400°F) out of mold<sup>(1)</sup>

	<b>Test Method</b>	<b>Value</b>
• <b>Color</b>		Black
• <b>Specific Gravity</b>		1.27
• <b>Hardness</b> , Shore A	ASTM D2240	66
• <b>Tensile Strength</b> , psi (N/mm <sup>2</sup> )	ASTM D412	1025 (7.0)
• <b>Elongation</b> , %	ASTM D412	190
• <b>Lap Shear Strength</b> , psi (N/mm <sup>2</sup> )		575 (4.0)
• <b>Cohesive Failure</b> , % (Primed Anodized Aluminum panels)		100

<sup>(1)</sup> Time at which material gels

<sup>(2)</sup> 0.5 in. (1.27 cm) thick cup specimen

**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.

**Kit Matching** **BLUESIL™ V-612** is kit matched when manufactured. This product should be processed using the specific matched Part A and Part B units supplied with the kit. Using a different lot of Part A or Part B may affect the properties of the product.

**Cure Inhibition** **BLUESIL™ V-612** cures by addition polymerization using PT catalysts which may be inhibited by certain other materials. 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.



## Instructions for use

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.

1. Mix Part A and Part B components according to recommended weight ratios. If power equipment is to be used, it is generally recommended to keep mixing speed at or below 350 rpm to prevent heat buildup, which can cause loss of working time and premature curing of the rubber. It is recommended that the container be filled to not more than 1/3 the container height to allow sufficient room for expansion during the deaeration procedure.
2. For these products requiring deaeration, place mixed material in a vacuum chamber and exert 29 inches Vacuum on the material. Some products will require that the vacuum be interrupted or "bumped" several times before the material crests and falls by itself. After the material has receded, keep the mixed material under full vacuum for a minimum of 15 minutes. Bleed air slowly into the chamber until atmospheric equilibrium is reached. Remove mixed and vacuumed material from the chamber. The material is now ready for pouring.
3. Some Bluestar Silicones Aerospace and Industrial products have a very long mixed pot life. Storing the mixture in a tightly sealed container at 0°F (-18°C) may extend the pot life even longer. Care should be taken when using this method to prevent moisture from condensing on the inside of cold containers and contaminating the mixture.

## Storage and shelf life

When stored in its original unopened packaging, at a temperature between 5 to 27C (41 - 81F), **BLUESIL™ V-612** may be stored for 12 months from the date of manufacture. Beyond this date, Bluestar Silicones no longer guarantees that the product meets the sales specifications.





## 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.

## Packaging

**BLUESIL™ V-612** is available in 264 ml tubes and 5 kg kits

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### Warning to users

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