Sealing & Bonding

BLUESIL<sup>™</sup> V-695



November 2011

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Silicone Aerospace Sealant

BLUESIL<sup>™</sup> V-695 is a black, two component addition cure, flowable silicone aerospace sealant Description for the use as an abradable air seal for compressor blades of jet engines. BLUESIL<sup>™</sup> V-695 imparts high thermal stability, good machinability, long work time, and low density. It is also designed to achieve optimum properties at the specified elevated temperature cure schedule.

Applications Abradable air seal for the compressor blades of jet engines.

## **Typical Properties**

TYPICAL PROPERTIES - AS SUPPLIED		TYPICAL CATALYZED PROPERTIES	
<ul> <li>Part A - Base Component</li> <li>Color</li> <li>Consistency</li> <li>Viscosity, cP. (mPa.s) Brookfield, HAT, #7 Spindle, 10 rpm</li> </ul>	Black Pourable 350,000	<ul> <li>Mixed at 24°C (75°F) and 50% R.H.</li> <li><i>Mix Ratio</i>, A:B (By weight)</li> <li><i>Viscosity</i>, cP. (mPa.s) Brookfield, HAT, #7 Spindle, 10 rpm</li> </ul>	10:1 190,000
Part B – Catalyst Component • Color	Clear		

## TYPICAL PROPERTIES OF CURED RUBBER,

Cured 2 hrs. @ 150°C (300°F) in mold; Post cured 1 hr. @ 204°C (400°F) out of mold

Property	Test Method	Value
Color		Black
Specific Gravity		0.74
• Hardness (Shore A);	ASTM D2240	58
• <i>Tensile Strength</i> , psi (N/mm <sup>2</sup> );	ASTM D412, Die C	330 (2.3)
• Elongation (%);	ASTM D412, Die C	110
• Lap Shear Strength, psi (N/mm <sup>2</sup> )		170 (1.2)
(Primed AMS 4910 titanium panels		
& cured 1.5 hrs. at 150°C (300°F)		

Please note: The typical properties listed in this data sheet are not intended for use in preparing specifications for any particular application of BLUESIL<sup>™</sup> silicone materials. Please contact our Technical Service Department for assistance in writing specifications.

Kit Matching	Many Bluestar Silicones Aerospace and Industrial products are kit matched when manufactured. These products 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	Some Bluestar Silicones Aerospace and Industrial products cure by addition polymerization using catalysts, which may be inhibited by other materials, found in some 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.
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.



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Instructions for use1.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 account on 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 lifeWhen stored in its original unopened packaging, at a temperature of 27°C (80°F), BLUESIL <sup>™</sup> V-695 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.SafetyPlease consult the Safety Data Sheet. Contact with eyes may cause transitory irritation, which usually disappears in a few hours. If eye contact occurs, flushing with water for at least 15 minutes will relieve discomfort. If irritation or discomfort persists, obtain medical attention. To obtain a material sa	BLUESIL <sup>™</sup>	V-695 November 2011 Distributed By Freeman Manufacturing & Supply Co. www.freemansupply.com 800-321-8511 FREEMAN		
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