



BLUESIL™ V-217

Silicone Elastomer for Potting and Encapsulating

Description **BLUESIL™ V-217** is a clear, two component, medium viscosity, addition cure silicone compound. It is designed for potting and encapsulating applications, and as a silicone wafer vacuum hold-down pad material.

Applications

- General potting and encapsulation of electrical devices
- Integrated circuits and relays
- Hold-down pad for silicone wafers
- Power supplies and TV fly-back transformer

Typical Properties

| TYPICAL PROPERTIES - AS SUPPLIED | | TYPICAL CATALYZED PROPERTIES | |
|---|-------------|--|--------|
| <u>Part A - Base Component</u> | | Mixed at 24°C (75°F) and 50% R.H. | |
| • Color | Clear | • Mix Ratio , A:B (Parts by weight) | 10:1 |
| • Consistency | Pourable | • Viscosity , cP. (mPa.s) | 44,000 |
| • Viscosity , cP. (mPa.s) | 50,000 | • Pot Life , hours ⁽¹⁾ | 2.5 |
| <u>Part B – Catalyst Component</u> | | | |
| • Color | Clear | | |
| TYPICAL PROPERTIES OF CURED RUBBER, Cured one hour at 150°C (300°F) | | | |
| Property | Test Method | Value | |
| • Color | | Clear | |
| • Specific Gravity | | 1.02 | |
| • Hardness , (Shore A) | ASTM D2240 | 29 | |
| • Tensile Strength , psi (N/mm ²) | ASTM D412 | 370 (2.6) | |
| • Elongation , (%) | ASTM D412 | 320 | |
| • Coverage , in ³ /lb (cc/kg) | | 27.1 (980) | |
| • Temperature Range , °C (°F) | | -54 to 204 (-65 to 400) | |
| • Adhesion, Primed , % | | 99 | |
| • Hardness , Shore A, 18 hrs at RT | ASTM D2240 | > 20 | |

⁽¹⁾ Time at which material gels


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.

Instructions for use

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.

| | |
|-------------------------------|---|
| 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 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. |
| 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. |
| Storage and shelf life | Shelf life of BLUESIL™ V-217 is eighteen (18) months from date of manufacture. Store material in original container in a cool, dry location at 80°F (27°C) or below, except when a specific temperature is noted on the front of a product Technical Data Sheet. Extended shelf life is probable. A retest of properties is required where product must meet customer specifications. Some products may still be used if the product is found to cure properly and otherwise meets customer criteria. Keep all container lids tightly closed when not in use to prevent product contamination. |
| Safety | Please 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 safety data sheet for this product contact Bluestar Silicones at 866-474-6342. |
| Packaging | BLUESIL™ V-217 is available in 20 kg container. |

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|  EUROPE |  NORTH AMERICA |  LATIN AMERICA |  ASIA PACIFIC |
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