



ISO-9001-2008 Certified

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TECHNICAL BULLETIN

EPOXIBOND-115 HIGH TEMPERATURE ADHESIVE

EPOXIBOND-115 is unfilled, heat curing, high temperature resistant epoxy adhesive. It maintains high lap shear strength up to 210°C and has excellent thermal and chemical resistance. It can be used for bonding and sealing in critical instrument applications. It is recommended for bonding metals, glass, and ceramic substrates.

TYPICAL HANDLING PROPERTIES:

Adhesive	EB-115
Hardener	EH-3
Mix ratio by weight, (Adhesive/Hardener)	100/15
Mixed Viscosity at 25°C, cp	6000-8000
Pot Life (100 grams) at 25°C, minutes	90
Shelf life:	
Two Parts Kit @ 25°C	2 years
Frozen @ -40°C	1 year

Recommended Cure	2 hrs @ 100°C + 2 hrs @ 175°C
Alternate Cure	2-4 hrs @ 150°C

TYPICAL CURED PROPERTIES

(Tested @ 25°C unless otherwise indicated)

Color	Clear
Specific Gravity	1.18
Hardness, Shore D	87
Water Absorption, %	
24 hr at 25°C	0.16
Linear Shrinkage, %	0.8
Lap Shear Strength to Aluminum, psi	
At 25°C	1900
At 200°C	400
Flexural Strength, psi	14,800
Flexural Modulus, psi	0.51x10 ⁶
Service Temperature range, °C	-55 to 230
Glass Transition Temperature, °C	175
Coefficient of Linear Thermal Expansion, 10 ⁻⁶ /°C	
From -55°C to 25°C	29
From 25°C to 130°C	56
Dielectric Constant at 1 kHz	3.8
Dissipation Factor at 1 kHz	0.009
Volume Resistivity, ohm-cm	8x10 ¹⁵

INSTRUCTIONS FOR USE:

1. Weigh each 100 grams of EB-115 to 15 grams of Hardener EH-3.
2. Mix until uniform. Scrape the sides and bottom of container repeatedly during mixing.
3. Apply to clean bonding surfaces and cure as recommended to achieve the desired properties. Typical cured properties were determined using recommended cure schedule. Some difference in properties may occur with the alternate or other cure schedules.

FROZEN ADHESIVE:

Thaw premixed frozen adhesive at room temperature for 5-10 minutes. Dispense adhesive and cure at recommended schedules.

AVAILABILITY:

2 parts Kit - Packaged in Pint, Quart, Gallon, and 5-Gallon size.

Premixed and frozen - Packaged in 3cc, 5cc, 10cc and 30cc disposable syringes and ship in dry ice at -80°C.

FOR INDUSTRIAL USE ONLY:

Practices of good housekeeping, safety and cleanliness should be followed before, during and after use.

WARNING!

Adequate ventilation of work place and ovens is essential. These materials may cause injury to the skin following prolonged or repeated contact and dermatitis in susceptible individuals. In case of skin contact, wash thoroughly with soap and water. For eyes, flush immediately with plenty of water for at least 10 minutes and seek medical attention. Refer to Material Safety Data Sheet (**MSDS**) for additional health and safety information.

DISCLAIMER: All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.