



ISO 9001-2008 Certified

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TECHNICAL BULLETIN

EB-106 HIGH IMPACT, LOW VISCOSITY EPOXY ADHESIVE

EB-106 is an undiluted, unfilled, low viscosity clear epoxy system that exhibits exceptional resistance to impact and thermal shock. Applications includes, high bond strength adhesive for most similar and dissimilar substrates; for making in-place laminates or for protective coating on metals etc. Also it can be used for semi-rigid, moisture proof, gas tight seals between plastic and metallic or other substrates. This is also recommended for potting devices such as connector shells from which rigid or flexible wires may protrude directly through the epoxy. EB-106 will pass USP Class VI requirement for biocompatibility. EB-106 is only available in premixed and frozen syringes and must be stored at -40°C or below.

<u>TYPICAL HANDLING PROPERTIES:</u>	
Epoxibond	EB-106
Mixed Viscosity at 25°C, cps	300-500
Work Life at 25°C, minutes	60-80
Recommended Cure	3 hr @ 65°C
Alternate Cure	24-48hr @25°C
<u>TYPICAL CURED PROPERTIES AFTER RECOMMENDED CURE:</u>	
(Tested @ 25°C unless otherwise indicated)	
Color	Clear
Specific Gravity	1.16
Hardness, Shore D	85
Water Absorption (24 hr @ 25°C), %	0.17
Lap Shear Strength to AL, psi	2700
Linear Shrinkage, %	0.27
Flexural Strength (yield), psi	13,500
Flexural Modulus (yield), psi	3.2x10 ⁵
Service Temperature range, °C	-55-120
Glass Transition Temperature, °C	65
Coefficient of Linear Thermal Expansion, 10 ⁻⁶ /°C	
Below Tg	59
Dielectric Strength, Volts/mil	450
Dielectric Constant at 1 kHz	4.14
Dissipation Factor at 1 kHz	0.012
Volume Resistivity, ohm-cm	8x10 ¹⁴
<u>OPTICAL PROPERTIES:</u>	
Refractive Index @ 25°C	1.52@ 589nm
Spectral Transmission, 380-980nm	99%

INSTRUCTIONS FOR USE:

1. Thaw premixed frozen adhesive at room temperature for 5-10 minutes. Dispense adhesive and cure at recommended schedules.
2. Apply to clean bonding surfaces and cure as recommended to achieve the desired properties.
3. 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:

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.

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