



ISO-9001-2015 Certified

718 Park East Drive, Woonsocket, RI 02895, USA

Phone: (401) 726-4500

Email: info@epoxyset.com ■ Web: www.epoxysetinc.com

TECHNICAL BULLETIN

EPOXICAST™ EC-1006 EPOXY POTTING COMPOUND

EPOXICAST-1006/EH-24 is a low viscosity, easily pourable, filled epoxy resin system featuring high thermal conductivity, good electrical insulation, and low shrinkage during cure. It is useful for potting and encapsulating components and modules where removal of heat and resistance to mechanical and thermal shock are prime considerations. The cured system provides excellent resistance to moisture, most organic solvents and inorganic chemicals. Typical Applications includes potting or encapsulating densely packaged power supplies, integrated circuits, small transformers, capacitors bushings etc.

TYPICAL HANDLING PROPERTIES:

Epoxicast	EC-1006
Hardener	EH-24
Mix ratio by weight, (Resin/Hardener)	100/16
EC-1006 viscosity at 25°C, cp	14,000-18,000
Mixed viscosity at 25°C, cp	1400-1800
Pot life at 25°C (100 gram), hrs	2

Recommended Cure 2hrs @ 25°C + 1 hr @ 100°C

Alternate Cure 24 to 48 hrs @ 25°C

TYPICAL CURED PROPERTIES:

(Tested @ 25°C unless otherwise indicated)

Color	Black
Specific Gravity	1.58
Hardness, Shore D	89
Linear Shrinkage, %	0.31
% Water Absorption % (24 hrs @ RT)	0.09
% Weight loss, % (10 days exposure at 125°C)	0.22
Service Temperature, °C	-55 to 120
Thermal Conductivity, W/mK	0.35
Glass Transition Temperature, °C	78
Coefficient of Thermal Expansion, 10 ⁻⁶ /°C	
Below Tg	39
Above Tg	190
Flexural Strength, psi	14,100
Flexural Modulus, psi	9x10 ⁵
Dielectric Strength, Volts/mil	460
Dielectric Constant at 1 kHz	4.8
Dissipation Factor at 1 kHz	0.014
Volume Resistivity, ohm-cm	3x10 ¹⁵

INSTRUCTIONS FOR USE:

Stir well the contents of each container every time before removing material. If the contents are hard or lumpy, warm to 80°C and mix thoroughly before removing material.

1. Weigh each 100 grams of EC-1006 to 12 grams of Hardener EH-24.
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.
4. Typical cured properties were determined using recommended cure schedule. Some difference in properties may occur with the alternate or other cure schedules.

AVAILABILITY:

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

FOR INDUSTRIAL USE ONLY:

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

WARNING!

Adequate ventilation of workplace 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.