

EpoPro® 8764A/B

Epoxy Potting System

Typical Properties

(Not for specification purposes. All tests run at 25°C unless otherwise noted)

Resin / A-side Properties:

Appearance	Visual	Black liquid
Specific Gravity	ASTM D-792	1.65 g/cc
Viscosity	ASTM-D-2393	22,500 cP
Flash Point, Closed Cup	ASTM D-92	>285°C (>545°F)

Hardener / B-side Properties:

Appearance	Visual	Off-white liquid
Specific Gravity	ASTM-D-792	1.60 g/cc
Viscosity	ASTM-D-2393	17,500 cP
Flash Point, Closed Cup	ASTM D-92	>33°C (>91°F)

Mix Ratio:

Parts by weight (volume)	100A : 50B (100A : 50B)
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Mixed Properties:

Initial Viscosity at 25°C	ASTM-D-2393,	17,500 cP
Gel Time, 150 gram, mass		>90 minutes

Recommended Cure Schedules:

24 hrs at 25°C or 1 hr at 65°C

Please note: any cure schedule selected for use should be confirmed through testing as being appropriate for your particular processing methods and for your intended application.

Cured Properties (cured 7 days at 25°C)

Appearance	Visual	Black
Specific Gravity	ASTM D-1475	1.63 g/cc
Shore Hardness	ASTM D-2240	85D
Glass Transition Temp (T _g)	Perkin Elmer Appl. #20	45°C
Coefficient of thermal expansion	ASTM E-381	
Alpha 1		7.4 x 10 ⁻⁵
Alpha 2		18.0 x 10 ⁻⁵
Thermal conductivity	ASTM F-433	0.54 W/mk
Volume resistivity @ 23°C	ASTM D-257	5.14 x 10 ¹⁵ Ω-cm
Surface resistivity @ 23°C	ASTM D-257	4.54 x 10 ¹⁶ Ω
Dielectric strength	ASTM D-149	457 V/mil
Dielectric constant	ASTM D-150	
60Hz 23°C		4.8
Dissipation factor	ASTM D-150	
60Hz @ 23°C		0.0264
Flammability	UL 94	Class HB

EpoPro® 8764A/B is a two-component epoxy system. Formulated for potting and encapsulating electrical and electronic components. This system has been designed with excellent flowability for superior leveling properties. Typical applications for this system include encapsulation of transformers, switches, filters, capacitors, modules and sensors.

Suggested Applications:

- Convenient two to one mix ratio by weight and volume
- Excellent air release
- Filled

Benefits:

- Allows the end-user great flexibility in selecting a processing method
- Compliant to Mil-I-16923

Storage Guidelines:

Store this material in a clean, dry environment in its tightly closed original container. These products are not considered temperature sensitive, but should ideally be stored at temperatures between 18-30°C (64-86°F). Under these conditions the products will have a minimum shelf-life of 12 months from the date of shipment

Processing Guidelines:

Mix using Meter-mix dispensing, or manually, as follows. Weigh the desired amount of resin into mixing container whose weight has been tared. If material has been heated, allow to cool to 25 ± 5°C or 77 ± 9°F before continuing. The pot life of mixed material will be shortened considerably if warmed material is used.

Weigh the desired amount of hardener into mixing container with resin. Mix thoroughly by means of mechanical mixer or manual stirring. Check for uniform color as a sign of complete mixing. Vacuum deairing is recommended to remove any entrapped air from the mixing procedure. To deair most products, 1-2 minutes under full vacuum is recommended for each quart of volume of mixed material. Quickly dispense potting material into cavity or channel to be sealed; be certain not to trap air bubbles as viscosity builds.

To reduce the cure time, the casting is often allowed to gel at room temperature and then post-cured 2-6 hours at 60-80°C. Small casting can be processed and directly cured at slightly higher temperatures (40-60°C). In case of humid environments (≥75% relative humidity) it is advisable to effect a full cure in an oven at 40-60°C in order to prevent vapor absorption, leading to specks on the surface of the casting.

Handling Precautions:

Mandatory and recommended industrial hygiene procedures should be followed whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

Personal Hygiene:**EpoPro® 8764A**

CAUTION! May cause eye irritation. Prolonged or repeated skin contact may cause irritation, and may cause allergic skin reaction. Harmful if inhaled, if swallowed. In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Do not inhale mists. Use with adequate ventilation. For industrial use only.

EpoPro 8764B

WARNING! FLAMMABLE Causes severe eye irritation skin irritation and possible allergic skin reaction. Harmful if inhaled and if swallowed. In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid contact with eyes and prolonged or repeated skin contact. Do not inhale mists. Use with adequate ventilation. For industrial use only.

First Aid

In case of contact:

Skin - Wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes.

Eyes - Flush eyes with plenty of water for 15 minutes and get prompt medical attention.

Inhalation - Remove person to fresh air

Ingestion - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

Other- Referral to a physician is recommended if there is any question about the seriousness of an injury.

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