

EpoPro[®] 8761 A/B/C



3 PART HIGH PERFORMANCE, EXPANDABLE EPOXY SYSTEM

EpoPro[®] 8761A/B/C is a low-viscosity, expandable, room temperature curing encapsulation system which provides light weight castings. This system has been formulated to encapsulate electrical/electronic components requiring good, lightweight insulation. The cured polymer provides excellent mechanical and electrical properties and has very good shock, impact, and peel resistance. The cured epoxy system is heat resistant up to at least 130°C and has very good resistance to moisture, solvents, and most chemicals. The EpoPro[®] 8761 system provides excellent adhesion to most materials including metals, wood, rubber, glass, and most plastics.

The EpoPro[®] 8761 system is available in many standard colors including amber, white, black & gray. For your specific application, we can recommend custom variations of this product to fit your processing or cured property requirements. Please contact us to discuss your application if you'd like to receive samples of a custom color or to discuss the development of a custom variant that would be suitable for your application.

SUGGESTED APPLICATIONS

- Large volume encapsulation
- Pressure sensitive device packaging
- Weight restricted components

HANDLING PROPERTIES	VALUE	TEST METHOD
<u>EpoPro[®] 8761-A (resin)</u>		
Visual Appearance	off-white to beige liquid or as ordered	Visual
Density, Part A	1.70 g/cm ³	ASTM E-201
Viscosity, Part A, @ 25°C	50,000 cps	ASTM D-2393
Flash Point	>93°C (>200°F)	ASTM D-92
<u>EpoPro[®] 8761-B (hardener)</u>		
Visual Appearance	Amber Liquid	Visual
Density,	1.01 g/cm ³	ASTM E-201
Viscosity, Part B, @ 25°C	500 cps	ASTM D-2393
Flash Point	>93°C (>200°F)	ASTM D-92
<u>EpoPro[®] 8761-C (additive)</u>		
Visual Appearance	Clear Liquid	Visual
Density,	1.00 g/cm ³	ASTM E-201
Viscosity, Part B, @ 25°C	36 cps	ASTM D-2393
Flash Point	>74°C (>165°F)	ASTM D-92
Mix Ratio (part by weight)	100A:10B:1C	
Mix Ratio (part by volume)	100A:17B:1.7C	

Product Datasheet

HANDLING PROPERTIES (contd.)

	VALUE	TEST METHOD
Viscosity, Mixed, at 25°C	17,000 cps	ASTM D-2393
Working life at 25°C	~45 minutes	
Gel-Time (200 g mass)	65 minutes	ASTM D-2471
Foam Density	0.35 ± 0.05 g/cm ³	

Cure Schedule: 24 hours at 25°C

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

PHYSICAL PROPERTIES (Tested at 25°C unless otherwise noted)

		TEST METHOD
Appearance	Amber-beige or as ordered	Visual
Foam Density	0.35 ± 0.05 g/cm ³	
Hardness, Shore D	75D	ASTM D-2240
Glass Transition Temperature (T _g)	40°C	ASTM E-1640
Coefficient of Thermal Expansion	47 x 10 ⁻⁶	
Thermal Conductivity	0.30 W/mK	ASTM D-2214
Water Absorption	1 day at 23°C 0.2% 30 min at 100°C 0.8%	
Tensile Strength	2,500	ASTM D-638
Insulation Resistance (ohms)	>2.0 x 10 ¹⁵	ASTM D-150
Volume Resistivity (ohm-cm)		ASTM D-150
@ 25°C	1.2 x 10 ¹⁵ -	
@ 100°C	2 x 10 ¹² -	
Dielectric Strength (kV/mm)	25	ASTM D-149

PROCESSING AND APPLICATION INSTRUCTIONS

This system can be mixed manually or by a metering/dosing system using either a dynamic or static mizer. If mixing manually, weigh (or proportion by volume) Part A, Part B and Part C in the indicated ratio into a clean mixing container. Mixing containers should preferably be made of polypropylene, polyethylene, glass, or non-corroding metal (stainless steel, aluminum, etc.). Always use weighing equipment having accuracy that is ±1% or less of the smallest quantity that you will be weighing. Blend Part A/B/C thoroughly by using a spatula or stirring stick for at least 2-3 minutes using a kneading motion. Scrape the bottom and sides of the mixing container carefully and frequently to produce a uniform mixture.

Apply to clean, dry surfaces. For best adhesion, abrade the surface with a wire brush, scouring pad, steel wool or coarse sand paper. After abrasion, clean the surface of any loose material and degrease with solvent or detergent to remove any contaminants. The material may then be applied with any suitable application method include brushes, spatulas, trowels, etc.

Product Datasheet



PACKAGING AVAILABLE

This product is available in several standard package sizes including, quarts, 1-gallons, 5-gallons, and drums.

Please call use with any special packaging requests, or for information on custom kitting.

STORAGE GUIDELINES

Store these materials in a clean, cool and dry environment in their tightly closed original containers. Protect from extended exposure to temperatures below 15°C (59°F). Crystallization may occur if the material is exposed to cold for extend periods. If this occurs, heat the entire container for 4 hours at 60°C to re-liquefy the material. Allow to cool to ambient temperature prior to using. Also protect the EpoPro® 8761-A/B/C from exposure to moisture or high humidity. Tightly re-seal containers after use. If the recommended storage conditions are observed the products will have a minimum shelf-life of 12 months from the date of shipment.

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® 8761-A

CAUTION! May cause eye & skin irritation. Prolonged or repeated skin contact or inhalation of vapors may cause allergic skin or respiratory reactions. Harmful if inhaled or swallowed. Avoid contact with eyes, skin, or clothing. Wear eye protection and impervious gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep containers closed when not in use. Use only with adequate ventilation. Do not take internally. Notice! Contains crystalline silica. Breathing dust may cause cancer and delayed lung injury.

EpoPro® 8761-B

WARNING! Corrosive. May cause eye & skin irritation. Prolonged or repeated skin contact or inhalation of vapors may cause allergic skin or respiratory reactions. Harmful if inhaled or swallowed. Avoid contact with eyes, skin, or clothing. Wear eye protection and impervious gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep containers closed when not in use. Use only with adequate ventilation. Do not take internally.

EpoPro® 8761-C

Combustible! In accordance with good industrial practices, handle with due care. Keep away from heat and flame. Harmful if inhaled or swallowed. Avoid contact with eyes, skin, or clothing. Wear eye protection and impervious gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep containers closed when not in use. Use only with adequate ventilation. Do not take internally.

Product Datasheet



FIRST AID

In case of contact:

Skin – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.

Eyes – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.

Inhalation - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.

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

DISCLAIMER

IMPORTANT: The following supersedes Buyer's documents. **SELLER / MANUFACTURER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller / Manufacturer be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results presented are based on controlled or laboratory work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

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