

EpoPro[®] 108A/B

Room Temperature Curing Epoxy Paste Adhesive

EpoPro[®] 108A/B epoxy is a white paste developed primarily for smoothing surfaces of plastics, composites, wood or metal. EpoPro[®] 108A/B epoxy paste has good adhesion, low shrinkage, and can be easily applied with a spatula, splining tools or squeegees. This product is ideal as a “wipe-on” paste for filling porosity on the surface of composite structures such as radomes, edge joints, aerodynamic & hydrodynamic surfaces, and polystyrene foam. Once cured, this product easily sands to a smooth finish.

EpoPro[®] 108A/B also has good electrical properties, making it ideal for applications requiring a smooth insulating surface, such as radomes. Additionally, it can lend a smooth appearance as well as structural support for windings and coils.

BENEFITS & APPLICATIONS

- Room Temperature Curing
- Good Electrical Properties
- For Smoothing, Bonding and Filling

HANDLING PROPERTIES	VALUE	TEST METHOD
<u>EpoPro[®] 108A</u>		
Color	Off-White	Visual
Density	1.54 g/cm ³	ASTM E-201
Viscosity, Part A, @ 25°C	325,000 cP	ASTM D-2393
<u>EpoPro[®] 108B</u>		
Color	Amber	Visual
Density	0.95 g/cm ³	ASTM E-201
Viscosity, Part B, @ 25°C	7 cP	ASTM D-2393
<u>Mixed Properties</u>		
Mix Ratio	100A:6B by weight (10A:1B by volume)	Calculated
Color	Off-White	Visual
Density	1.50 g/cm ³	ASTM D-792
Mixed Viscosity	220,000 cP	ASTM D-2393
Pot life (120 grams) @ 25°C	20-50 minutes	ASTM D-2393
Shelf-life	at least 1 year room temperature (~ 25°C)	
Suggested cure times	3 days at 25°C or gel at 25°C + 2 hours at 60°C*	

* Note: many other cure schedules are possible. Please contact us for assistance if you would like to use an alternate cure schedule.

Product Datasheet

PHYSICAL PROPERTIES	VALUE	TEST METHOD
Shore Hardness	89D	ASTM D-2240
Compressive Strength	15,000 psi	ASTM D-695
Compressive Modulus	750,000 psi	ASTM D-790
Flexural Strength	10,000 psi	ASTM D-790
Flexural Modulus	1,000,000 psi	ASTM D-790
Volume Resistivity, ohms-cm		ASTM D-257
At 25°C	5 x 10 ¹⁴	
At 93°C	1.1 x 10 ¹⁰	
Dielectric Constant,		ASTM D-150
at 60 Hz	5.2	
at 1 KHz	5.2	
at 10 KHz	5.0	
at 1 MHz	4.5	
at 9.3 GHz	3.0	
Loss Tangent, % at 1 KHz		ASTM D-150
at 60 Hz	0.03	
at 1 KHz	0.02	
at 10 KHz	0.025	
at 1 MHz	0.032	
at 9.3 GHz	0.028	
Lap Shear Strengths		ASTM D-1002
Effect of Temperature on Lap Shear Strength:		
<u>Test Temperature</u>		
-55°C	2650 psi	
25°C	2000 psi	
83°C	1950 psi	
With Polyester Substrate:	Laminated Substrate Failure	
Moisture absorption	0.15%	ASTM D-570
(24 hours at 25°C - % weight gain)		

NOTE: Typical Properties determined using EpoPro® 108A/B cured 16 hours at 40°C cure - unless otherwise stated. Values are based on laboratory or average production results – not for specification purposes.

*Custom colors available by request. Custom viscosity, pot life and cure speeds are also available by request.

SUGGESTED PROCESSING GUIDELINES

EpoPro® 108A/B can be applied by stiff brush, squeegee, knife, or spatula. It is also suitable for meter-mix dispensing and can be supplied in dual syringes cartridges for use with static mixing nozzles.

For manual mixing, weigh Part A and Part B in the recommended ratio as accurately as possible into a clean mixing container. Always use weighing equipment having accuracy in proportion to the amounts being weighted. Blend by using a spatula or stirring stick for 1-2 minutes using a kneading motion. Scrape the bottom and sides of the mixing container carefully and frequently to produce a uniform mixture. Always apply the adhesive to clean, dry surfaces.

For best bond strength, roughen surface to be bonded with a wire brush, sand-blasting, or other suitable methods. After roughening, clean and dry surface and remove and loose material prior to bonding. Optimal bond strengths are typically achieved with an adhesive bondline thickness of 3 – 5 mils, but larger gaps and thicker bondlines are possible with this adhesive without major loss of mechanical strength.

Product Datasheet



STORAGE GUIDELINES

Store this material in a clean, cool and dry environment in its tightly closed original container. Products may settle during storage and should be thoroughly re-mixed prior to use. Avoid extended exposure to high humidity. Tightly re-seal after use. If the recommended storage conditions are observed the products will have a minimum shelf-life of 24 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® 108A

WARNING!!! Vapor or fumes may be harmful if inhaled or ingested. Slightly irritating to eyes, moderately irritating to skin.

EpoPro® 108B

DANGER! Corrosive! May cause asthma with possible long-term lung damage. Cross-sensitization to other amines may occur. Causes severe eye and skin burns. Harmful if inhaled, ingested or absorbed through skin.

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 supercedes 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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