

## EpoPro<sup>®</sup> 2279A/B

### MULTIPURPOSE EPOXY ADHESIVE, CASTING, & POTTING SYSTEM

EpoPro<sup>®</sup> 2279A/B is 2-part epoxy system that cures into a tough, semi-flexible polymer. It is excellent for many adhesive applications where a tough, semi-flexible bond is desirable and for many potting and casting applications where it provides excellent shock and vibration protection and good mechanical properties. In addition, the EpoPro 2279A/B demonstrates excellent adhesion to most materials and provides very good chemical and environmental resistance.

The EpoPro 2279A/B resin is available in a standard amber color or in custom colors. Many other custom variations are available including thickened or thinned versions, accelerated versions offering shorter cure times, and many other modification designed to suit your application or production process. Please contact us to discuss your application if you'd like to receive samples of a custom variant that would be suitable for your application.

#### SUGGESTED APPLICATIONS:

- Multipurpose, easy to use adhesive
- Tough, vibration and impact resistant potting or casting material

<b>HANDLING PROPERTIES</b>	<b>VALUE</b>	<b>TEST METHOD</b>
<u>EpoPro 2279 Part A</u>		
Visual Appearance	Clear to light yellow	
Density	1.10 g/cm <sup>3</sup>	ASTM E-201
Viscosity, Part A, @ 25°C	2500 cps	ASTM D-2393
Flash Point	>93°C	ASTM D-92
<u>EpoPro 2279 Part B</u>		
Visual Appearance	Amber	
Density	0.94 g/cm <sup>3</sup>	ASTM E-201
Viscosity, Part A, @ 25°C	4,000 cps	ASTM D-2393
Flash Point	>93°C	ASTM D-92
Mix Ratio (part by weight):	2 part A: 1 part B	
Shelf-life:	12 months @ 25C stored in the original containers.	
Pot life (100 grams) @ 25°C	3 hours	
Cure Schedules:	24 – 48 hours @ 25°C or 3-4 hours at 65°C*	
*Note: many other cure schedules are possible. Please contact us for assistance if you'd like to use an alternate cure schedule.		

<b>PHYSICAL PROPERTIES</b> (Tested at 25C unless otherwise noted – cured 2 hours @ 150C)		
		<u>TEST METHOD</u>
Appearance	Clear, light amber	Visual
Hardness, Shore D At 25°C	75D	ASTM D-2240
Tensile Strength	3,000 psi	ASTM D-638
Tensile Elongation	7.0%	ASTM D-638
Flexural Strength	7,800 psi	
Compressive Yield Strength	6,500 psi	
Curing Shrinkage (linear)	0.08%	
Glass Transition Temperature (Tg)	8°C	ASTM D-648
Coefficient of Thermal Expansion (CTE): below Tg / above Tg (ppm/°C)	75 / 108	ASTM E-831
Moisture absorption (2 hours in boiling water - % weight gain)	0.31%	ASTM D-570
Thermal Conductivity	0.18 W/mK	ASTM D-2214
Thermal Rating	-55°C to 180°C	EIC 216
Fungus Resistance	Non-Nutrient	Mil-I-46058C
Volume Resistivity (ohm-cm) @ 25°C / @ 95°C	1.0 x 10 <sup>14</sup> / 1.0 x 10 <sup>8</sup>	Mil-I-46058C
Dielectric Strength (V/mil)	395	ASTM D-149
Dielectric Constant @ 25°C @ 60 Hz / @1 MHz	4.00 / 3.50	ASTM D-150
Dissipation Factor @ 25°C @ 1 KHz / @1 MHz	0.02 / 0.029	ASTM D-150

**NOTE** : Values are based on laboratory or average production results – not for specification purposes.  
Samples cured 7 days @ 25°C.

### **SUGGESTED PROCESSING GUIDELINES:**

EpoPro 2279A/B can be applied by stiff brush, roller, squeegee, knife, spatula, or from a syringe. It is also suitable for meter-mix dispensing and can be supplied in premixed and frozen syringes on request.

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.

For best results vacuum de-air prior to potting or casting. Vacuum de-gassing may not be necessary for adhesive applications, but always apply the adhesive to clean, dry surfaces for best bond strength. For the highest mechanical strength or for improved chemical or heat resistance use a heat cure or allow to cure at room temperature then post cure for 10 - 20 minutes at 100C.

## **STORAGE GUIDELINES:**

Store the EpoPro 2279 Part A & B in a clean, cool and dry environment in its tightly closed original containers. Protect from extended exposure to temperatures below 15°C (59°F) to prevent crystallization. If crystallization occurs, heat the entire container of 2279A or B for 2- 4 hours at 60°C to re-liquefy the material. Also protect from exposure to extended 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 2279A**

**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.

### **EpoPro 2279B**

**WARNING!** 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.

## **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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