

Clear Laminating Epoxy

Product Description

PIONEER CLEAR LAMINATING EPOXY is a two-part water clear liquid epoxy system specifically designed for wet lay-up and ambient temperature cure of wood, fiber-reinforced composites such as aramid (kevlar), carbon, glass fibers, as well as other inorganic particulates.

Key Features

- Dries clear
- Easy to apply
- Self-levelling
- Good water and chemical resistance
- Good encapsulation for protection and reinforcement
- For table tops, bars, wood finishes, and see-through encapsulations
- For strengthening of beams, columns and slabs in buildings

Product Specifications / Typical Properties / Physical Characteristics

Table 1. Wet Properties*

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Parameters	Component A	Component B			
	(RESIN)	(HARDENER)			
1. Appearance	Clear, flowy	Very light yellow,			
		flowy			
2. Specific Gravity	1.15	1.02			
3. Viscosity @ 25°C	1698 cps	200-400 cps			
4. Solids Content	100%	42%			

Table 2: Mixed State Properties*

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Results				
2 parts A: 1 part B				
Clear, colorless, flowy				
30-40 minutes				
5-8 hours				

Applications







Table 3. Cured State Properties*

Parameters	Results
Full cure time	72 hours
2. Hardness	75 minimum
(after 24 hours), shore D	
3. Water resistance	Excellent
4. Weathering Resistance	Slight color will fade through
	time (clear epoxy-based
	products are typically not
	UV-resistant)
5. Tensile Strength	5800 psi
(as composite with fiberglass)	
ASTM D638	
6. Tensile Strength	4900 psi
ASTM D638	
7. Flexural Strength	7300 psi
ASTM D790	
8. Compressive Strength	6600 psi
ASTM D695	
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^{*}Typical Values and characteristics only.

Application Procedure

A. Surface Preparation

Surface contaminants such as dirt, grease, oil or wax must be removed from areas to be joined. Clean surfaces by sanding,



ISO 9001:2015 and ISO 14001:2015 Certified

sandblasting or brushing for stronger bonds. Surfaces should be clean and ready for application before the adhesive is mixed.

B. Mixing

Mix 2 parts of A to 1 part of B by volume. Better to use separate spatulas (or spoon) to avoid contamination. Blend thoroughly until color streaks disappear and a uniform color is obtained. To avoid waste, prepare a quantity just enough to be consumed within 30 minutes.

C. Method

Apply mixed compound with a putty knife or spatula.

Three field repair methods commonly used are:

- 1. Filament winding
- 2. Dry Installation
- 3. Wet Installation

D. Cleaning

Clean all tools or equipment used while adhesive is still in its uncured state. Use Pioneer Epoxy Reducer or solvents to clean tools and spills.

Packaging

Size	e Weight Quantity per	
Can Set	3.00 Kg	4 sets

Certification and Compliance: Lead-free

Туре	Component A	Component B	Limits
Lead (Pb) content, ppm	<5	<5	Maximum concentration value (MCV) allowed is <1000 ppm

Storage

Store in a dry place at ambient temperature. Keep containers tightly closed, when not in use.

Shelf Life

12 months from manufacturing date when kept in a sealed, unopened container following the required storage condition.

Health and Safety Precautions

For Component A For Component B







PREVENTION

- · Wash skin thoroughly after handling.
- Wear protective gloves/clothing/eye and face protection.
- · Avoid breathing fumes.
- Contaminated work clothing should not be allowed out of the workplace.
- · Avoid release to the environment.

RESPONSE

If on skin or hair: Wash with plenty of soap and water.

Take off contaminated clothing and wash before re-use.

If skin irritation or rash occurs, get medical attention.

If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists, get medical advice/attention. Collect spillage.

KEEP OUT OF REACH OF CHILDREN.

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