

# **Maestro Epoxy**



PIONEER MAESTRO EPOXY is a 100% solids thermosetting plastic compound that forms strong bonds on a wide variety of rigid materials; e.g. glass, metals, ceramics, concrete, wood and some plastics (except polyethylene, soft PVC and teflon). It is used as boat filler for hair line gaps, as a putting compound and as an adhesive. Maestro Epoxy's feature is its property to resist cracking due to movement associated with wood expansion & contraction because of its flexibility.



- Marine adhesive
- Functions as an adhesive and sealant in one
- Flexible- resists cracking due to movement or wood expansion
- 100% solids content
- Water-resistant
- Chemical-resistant
- Sandable and Paintable

# Product Specifications / Typical Properties / Physical Characteristics

Table 1. Wet Properties\*

Parameters	Component A (RESIN)	Component B (HARDENER)
1. Appearance	Off-white to cream,	Cream, soft paste
	flowy	
2. Specific Gravity	1.78	1.66
3. Viscosity @ 25°C	76,000-100,000 cps	1,300,000-2,000,000 cps
4. Solids Content	100%	100%

Table 2: Mixed State Properties\*

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Paramet	ers	Results			
1. Mixing	Ratio	1 part A: 1 part B (by volume)			
2. Appea	rance	Cream			
3. Potlife	@ 24-33°C	60-120 minutes			
4. Setting	g Time @ 24-33°C	4-8 hours			

#### **Applications (Ideas)**

- As a Marine adhesive for boat building
- Repairing or restoration of wooden boats
- Sealing gaps in wood imperfections and joints
- May be used as a putty or masilya





Table 3. Cured State Properties\*

Parameters	Results
1. Full cure time	72 hours
2. Hardness (after 24 hours),	70 minimum
shore D	
3. Water resistance	Excellent
4. Weathering Resistance	Color will fade through time
	(epoxy-based products are
	typically not UV-resistant)
5. Lap Shear Strength	>500 psi
(wood-wood)	
ASTM D905	
6. Tensile Strength	1800 psi
ASTM D638	
7. Flexural Strength	1300 psi
ASTM D790	
8. Compressive Strength	2500 psi
ASTM D695	
(wood-wood) ASTM D905 6. Tensile Strength ASTM D638 7. Flexural Strength ASTM D790 8. Compressive Strength	typically not UV-resistant) >500 psi  1800 psi  1300 psi

<sup>\*</sup>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, sandblasting or brushing for stronger bonds. Surfaces should be clean and ready for application before the adhesive is mixed.



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### **B.** Mixing

Mix equal parts by volume of components A and B. 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 1 hr.

#### C. Method

- Apply mixed compound with a putty knife or spatula on one or both faces of glue joints.
- 2. Join surfaces with sufficient pressure to ensure complete contact.
- 3. Allow to cure or to harden.
- 4.Unnecessary handling should be avoided until cure is complete. On its uncured state, scrape off excesses from edges or joints or immediately spread out the mixture on surfaces to be settled, filled or patched.

#### 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**

SKU	Packaging	Weight	Quantity
		of set, kg	per box
Gallon set	Tin can	11.61	2 sets
Quart set	Tin can	2.91	6 sets
Pint set	Tin can	1.45	12 sets
1/2 Pint set	Tin can	0.73	24 sets
1/4 Pint set	Tin can	0.37	50 sets

Note: 1 set= 1 pc component A + 1 pc component B

#### **Certification and Compliance**

Туре	Component A	Component B	Limits
Lead (Pb) content, ppm	<10	<10	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**

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

#### **Health and Safety Precautions**



#### WARNING

#### Hazards

Causes skin and eye irritation. May cause an allergic skin reaction.

#### Precaution

Wash skin thoroughly after handling.

Wear protective gloves/clothing/eye/face protection.

Contaminated work clothing should not be allowed out of the workplace.

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.

#### **Warranty and Disclaimers**

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