

NON-SAG EPOXY

High Performance Marine Applications

Product Description

PIONEER NON-SAG MARINE EPOXY is a two-component adhesive with a non-flowing consistency, making it very suitable for adhesive and sealant/gap filler applications in boat building. Its non-sag quality allows it to perform well on vertical or overhead applications with a maximum thickness of 1/2 inch.



Key Features

- Heavy-duty epoxy adhesive
- Non-sag up to 1/2 inch thick
- For vertical or horizontal applications
- Adheres to either damp or dry surface
- 100% solids content
- Solvent-free formulation
- Low VOC
- Non-shrinkable
- Water-resistant
- Solvent-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	Yellowish-beige, thixotropic paste	Beige, thixotropic paste
2. Specific Gravity	1.78	1.71
3. Viscosity @ 25°C	1,527,000 cps	3,190,000 cps
4. Solids Content	100%	100%

Table 2. Mixed State Properties*

Parameters	Results
1. Mixing Ratio	1 part A: 1 part B (by volume)
2. Appearance	Yellowish-Beige
3. Potlife @ 24-33°C	38-70 minutes
4. Setting Time @ 24-33°C	2-4 hours
5. Slump (1/2" thick)	0 mm

Table 3. Cured State Properties*

Parameters	Results
1. Full cure time	72 hours
2. Hardness (after 24 hours), shore D	80 minimum
3. Shrinkage	nil
4. Water resistance	Excellent
5. Chemical Resistance	Resistant to most acids, alkalis and other organic solvents (not for concentrated types)
6. Weathering Resistance	Color will fade through time (epoxy-based products are typically not UV-resistant)
7. Lap Shear Strength (wood-wood) ASTM D905	1000 psi
8. Tensile Strength ASTM D638	3600 psi
9. Flexural Strength ASTM D790	6000 psi
10. Compressive Strength ASTM D695	8100 psi

Table 4. Coverage per Gallon Set*

Thickness	Coverage
1/16"	45 sq. ft
1/8"	23 sq. ft
1/4"	11 sq. ft
1/2"	6 sq. ft

*Typical Values and characteristics only.

Applications

Bonds

- Dry or damp surfaces of wood, metal, concrete, glass, fiberglass (FRP or GRP) and some plastics.
- Attachment of metal fixtures, hull fittings and trims.

Seals

- Rough or imperfect grains of wooden hulls and structures.
- Leaks on rigid pipe joints.

Fills

- Dents or curves and punctured holes of metal structures such as cars, trucks, other vehicles or equipment.
- Gaps, irregular surfaces of wooden boat hull structures.

Repairs

- Imperfect joints, cracks, rot areas or holes caused by sea borers or when wood replacement is necessary.
- Masonry defects such as loose ceramic tiles, adobe stones, bricks,

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.

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 its pot life period

C. Method

1. Apply mixed epoxy 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 within 4 hours prior to sanding or filing.
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	Quantity per box
Gallon set	Tin can	2 sets
Quart set	Tin can	6 sets
Pint set	Tin can	12 sets
1/2 Pint set	Tin can	24 sets
1/4 Pint set	Tin can	50 sets

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

Certification and Compliance

Type	Component A	Component B	Limits
Volatile Organic Content (VOC), g/L	1.88	6.74	VOC limits <ul style="list-style-type: none"> • Multipurpose construction adhesives- 70 g/L • Wood Flooring adhesive- 100 g/L
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

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

Health and Safety Precautions



WARNING

Pioneer Adhesives, Inc.
Formerly Republic Chemical Industries, Inc.

ISO 9001:2015 and ISO 14001:2015 Certified

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Pioneer
Do it right.

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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