



FlexPoxy is a two-part epoxy resin that does not sag, run, or shrink. Its thick formula allows it to fill large cavities in a single application. When cured, it remains flexible making it ideal for environments that require flex such as keel joint repairs. FlexPoxy creates a superior bond to all epoxies, polyester resins, metals and wood. It can be sanded, machined, cut, filed, planed, drilled, tapped, or nailed making it perfect for filling, filleting, forming, fairing, and fastening. This low odor formula is resistant to chemicals and is safe to use above and below the waterline. FlexPoxy can be molded and shaped during application and is easily tinted with paints and stains. FlexPoxy can be over coated by most paints and stains.

- **Will not sag, run, or shrink**
- **For large or small repairs**
- **Remains flexible**
- **Offers superior bonding**
- **Can be molded and shaped**
- **Use above and below the waterline**
- **Can be machined, sanded, drilled and tapped**
- **Low odor formula**

PHYSICAL DATA	APPLICATION DATA	ASSOCIATED PRODUCTS
<p>VEHICLE TYPE: Epoxy/Polyalkylamine</p> <p>PIGMENTATION: None</p> <p>COLOR: Part A - Blue, Part B - Clear, Mix - Pink</p> <p>COMPONENTS: Two</p> <p>MIX RATIO: 2 to 1 by volume (100 to 44 by weight)</p> <p>CURING MECHANISM: Chemical Cure</p> <p>SOLIDS (theoretical):</p> <p style="padding-left: 20px;">By weight....100%</p> <p style="padding-left: 20px;">By volume....100%</p> <p>VOC: 0 g/l</p> <p>FLASH POINT: Over 200°F</p> <p>DENSITY: 9.14 lbs/gal (mixed)</p> <p>TENSILE STRENGTH: After 10 days @ 77°F...2800 psi</p> <p>ELONGATION: After 10 days @ 77°F...35%</p> <p>COMPRESSIVE STRENGTH: After 10 days @ 77°F...7,400 psi</p> <p>SHORE HARDNESS: After 10 days @ 77°F...65D</p>	<p>METHOD: Putty knife or spatula</p> <p>INDUCTION PERIOD: None</p> <p>APPLICATION TEMP: 40° F. Min. - 90°F. Max.</p> <p>POT LIFE: 20-25 minutes @ 25°C (77°F)</p> <p>SET TIME: 3 hours @ 25°C (77°F)</p> <p>CURE TIME: 16 hours @ 25°C (77°F)</p> <p>CLEAN-UP SOLVENT: 97 Epoxy Thinner, Xylol or denatured alcohol</p>	<p>D95 Fiberglass Dewaxer</p> <p>97 Epoxy Thinner</p> <p>120 Brushing Thinner</p> <p>4100/4101 Pettit Protect White High Build Epoxy Primer</p> <p>4700/4701 Pettit Protect Gray High Build Epoxy Primer</p>



# FlexPoxy

## Flexible Repair & Construction Epoxy

FlexPoxy High Performance Marine Epoxy exhibits superior bonding capabilities with fiberglass, wood, steel and aluminum. After curing, FlexPoxy retains a very high elasticity ( $\pm 35\%$  of volume), overcoming the most negative feature of other epoxies - brittleness. FlexPoxy is ideal for environments that require flex, such as keel joint repair. FlexPoxy can be used at temperatures ranging from 40° to 90°F (+5° to +30°C) without any negative effect on the final results. Optimum working time with FlexPoxy is between 20-25 minutes at temperatures of 77°F (25°C). (Temperature will affect hardening time). Do not continue working on the specific project after this time as the epoxy can sag. Full cure (hardening) occurs 16 hours after application (at 70°F [20°C]). FlexPoxy has excellent sanding properties with little dust. FlexPoxy stays firm and has a smooth consistency while being used. FlexPoxy is easy to model into adjacent contours of your work area and will not sag, run or shrink (no thermal burn) during or after application. FlexPoxy elastic epoxy resin is 100% pure epoxy and is solvent (0 VOC's) and filler free. FlexPoxy can be tinted with all types of oil-based, polyurethane or epoxy paints, even wood stains. To overcoat simply sand and overcoat with oil-based, polyurethane or epoxy paint. FlexPoxy will not "blush" (amine blush) through any type of paint; no primer is required. FlexPoxy dual component cartridge is re-sealable using supplied screw cap. It is recommended that FlexPoxy be stored at room temperature or below.

**INSTRUCTIONS FOR USE:** The dual component cartridge acts as a mixing control system to assure a perfect mixing ratio of Component A and B (2:1). Remove the screw cap and place the open cartridge in the cartridge gun. Squeeze out as much resin and hardener as you think you will need (the smaller the working batch the better) onto a plastic palette or rigid surface. Mix both components with a spatula or putty knife until the blue color has disappeared. You should now have a uniform pink mixture on your palette. If mixture does not have a pinkish color it may sag but all other properties will remain unchanged. Spread the mixture over the palette in a thin layer. This increases the working time and allows you to keep air bubbles to a minimum. If you make a fresh batch on the same palette, you do not have to wait until the old mixture has hardened and the palette has been cleaned. First apply a thin layer on the parts or spots that need repairing or bonding to assure good contact with the substrate. Then apply the rest of the mixture to the area being worked on and model it into the desired form. The maximum working time of the FlexPoxy is between 20 to 25 minutes at a temperature of 77°F (25°C). Do not continue working on the area after this time, because the epoxy will sag. After a full cure (minimum 16 hours at 77°F [25°C]) the area can be ground, planed, routed, filed, sanded and then painted. 97 Epoxy Thinner is ideal for cleaning up of work areas and tools before the epoxy hardens.

### SYSTEMS

**Damaged or Rotten Wood:** Remove all paint. Cut out and remove all loose and/or rotten wood. Be certain that all rotten wood is removed as any entrapped rotten wood will continue to rot after repair. Sand lightly and always remove sanding dust. The moisture content of the wood should be less than 18% before application. Prepare FlexPoxy and model in to your project the shape and contour desired. After a 16 hour cure @ 77°F (25°C) you can grind, plane, router, or sand to achieve shape desired.

**Fiberglass Hull and Topside Repair:** Remove all loose resin and glass mat. Remove all dirt, grease and wax with Pettit 120 Brushing Thinner. Sand lightly and remove sanding dust. When repairing profiled or corrugated fiberglass, wood or steel surfaces with FlexPoxy it is a good idea to create a counter profile or mold of the pattern onto a plastic spreader so you can cut down on having to make complicated freehand moldings or designs after curing.

**Blister Repair:** Open the blister, crack or small hole with a sharp scraper. Contour the substrate. It should be dry (no more than 3% H<sub>2</sub>O when checked with a moisture meter). A wet substrate cannot provide permanent bonding. Sand the dry substrate with 60-80 grit sandpaper. Remove the loose particles and dust. Clean the substrate with Pettit 120 Brushing Thinner. Apply West System 105/205 or System Three SilverTip Epoxy directly to the blister cavity and/or laminate to "wet out" exposed fiberglass fibers or matting. Let dry 3-5 hours at 77°F. Then apply a very thin layer of FlexPoxy and press it into the epoxy coated substrate to assure good contact. Apply more FlexPoxy to fill the blister, crack or small hole and smooth the repair. Let it dry at least 24 hours at 77°F (25°C) and then sand it thoroughly with 60-80 grit sandpaper. Overcoat repairs with three coats of Pettit Protect 4700/4701 Gray or 4100/4101 White High Build Epoxy Primer.

**Leaking and/or Loose Cleats and Deck Hardware:** Loosen and remove mountings and carefully remove all remnants of old filler and dirt. Tape off the position of the mounting with masking tape. Roughen the surface area of the mounting with 80-grit sandpaper. Completely remove oil, dirt, grease and wax with Pettit 120 Brushing Thinner. Spread the FlexPoxy epoxy on the underside of the mounting hardware as well as into the mounting holes of the hardware. Place the mounting back into position. Again, fill mounting holes with the FlexPoxy and reinstall bolts and nuts. Remove masking tape and excess resin immediately.

### Useful Tips:

- Store the components at room temperature or below but do not freeze.
- Do not use in the rain or at temperatures below 40°F. At temperatures of 40°-55°F, the curing time will be longer than 16 hours.
- Flexible plastic palettes and plastic putty knives are easy to clean. Once the FlexPoxy hardens, just bend the plastic palette or putty knife backward and forward until the hardened resin becomes loose.
- Use Plexiglas strips or sheets for complicated corner, edge and large hole repairs to ensure a 100% smooth filling.
- The mixture can be colored by adding paint or pigment pastes. Do not use more paint or pigment than required to obtain the right color.
- Not all plastics can be bonded together with this product. Always test first. Put some Pettit 97 Epoxy Thinner on a piece of cloth or tissue and rub over a small area of the plastic. If the plastic becomes sticky, the product will bond to the plastic.
- When using with wood, always sand first and check moisture content of wood. Wood must have moisture content of 18% or less for proper adhesion.
- For the best results when using FlexPoxy as fairing, cover the faired area with thin polypropylene or polyethylene film and roll the product smooth with a roller cage and roller cover over the film. After curing (approximately 16 hours) peel the plastic sheet off. This will produce a smooth finish that will require less sanding time prior to over coating.
- Do not apply polyester gel-coat over FlexPoxy.