PETTIT PAINT®

# FLEXPOXY

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

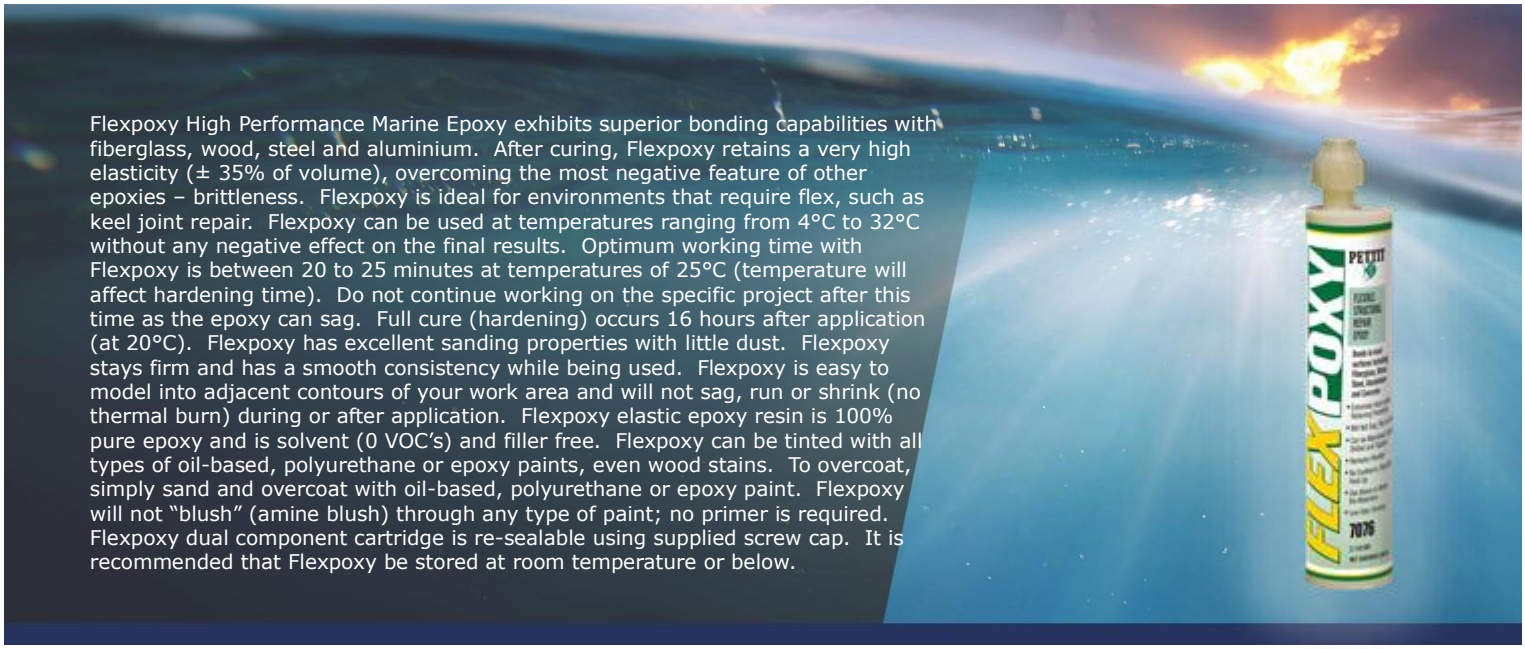

**FLEXIBLE REPAIR & CONSTRUCTION EPOXY**

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 odour formula is resistant to chemicals and is safe to use above and below the waterline. FlexPoxy can be moulded and shaped during application and is easily tinted with paints and stains. FlexPoxy can be overcoated by most paints and stains.

| TECHNICAL INFORMATION | |
|---|---|
| **VEHICLE** | Epoxy / Polyalkylamine |
| **PIGMENTATION** | None |
| **COLOURS** | Part A – Blue, Part B – Clear, Mix – Pink |
| **COMPONENTS** | 2 |
| **MIX RATIO BY VOLUME** | 2:1 |
| **MIX RATIO BY WEIGHT** | 100 to 44 |
| **CURING MECHANISM** | Chemical cure |
| **SOLIDS BY WEIGHT** | 100% |
| **SOLIDS BY VOLUME** | 100% |
| **VOC** | 0 grams/litre |
| **FLASH POINT** | Over 93°C |
| **DENSITY** | 1kg/litre (mixed) |
| **TENSILE STRENGTH** | After 10 days at 25°C: 19.3 MPa |
| **ELONGATION** | After 10 days at 25°C: 35% |
| **COMPRESSIVE STRENGTH** | After 10 days at 25°C: 2.25 MPa |
| **SHORE HARDNESS** | After 10 days at 25°C: 65D |
| **METHOD** | Putty knife or spatula |
| **INDUCTION PERIOD** | None |
| **APPLICATION TEMPERATURE** | 4°C Min / 32°C Max |
| **POT LIFE** | 20 to 25 minutes at 25°C |
| **SET TIME** | 3 Hours at 25°C |
| **CURE TIME** | 16 Hours at 25°C |
| **CLEAN-UP SOLVENT** | 97 Epoxy Thinner, Xylol or denatured alcohol |
| **PACKAGING** | 190ml Cartridge |
| **SHELF LIFE** | 24 Months from date of manufacture |

**ASSOCIATED PRODUCTS:** 97 Epoxy Thinner, 120 Brushing Thinner, Pettit Protect High Build Epoxy Primer




Flexpoxy High Performance Marine Epoxy exhibits superior bonding capabilities with fiberglass, wood, steel and aluminium. After curing, Flexpoxy retains a very high elasticity (± 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 4°C to 32°C without any negative effect on the final results. Optimum working time with Flexpoxy is between 20 to 25 minutes at temperatures of 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 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 colour has disappeared. You should now have a uniform pink mixture on your palette. If mixture does not have a pinkish colour 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 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 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.

**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 into your project the shape and contour desired. After a 16-hour cure at 25°C you can grind, plane, router, or sand to achieve shape desired.

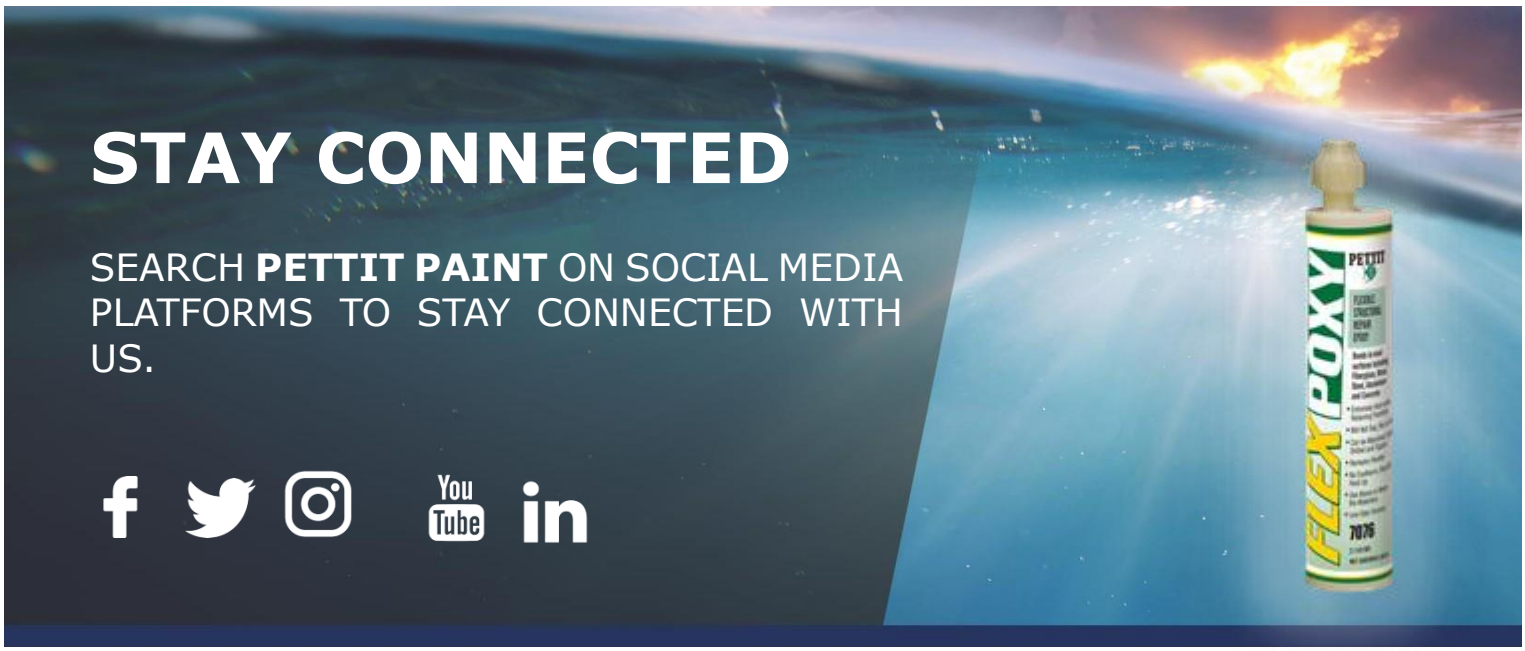
**FIBERGLASS HULL OR TOPSIDE REPAIR:** Remove all loose resin and glass mat. Remove all dirt, grease and wax with Pettit 120 Brushing Thinner. Sand lightly and remove sanding dust. When repairing profiled or corrugated fiberglass, wood or steel surfaces with FlexPoxy, it is a good idea to create a counter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

**CLEAN-UP:** Remove excess uncured sealant from surfaces and tools with Pettit 120 Brushing Thinner. Excess cured sealant must be cut or scraped away. Do not use Pettit 120 Brushing Thinner to clean hands or skin. Wash hands or skin with soap and water.

**STORAGE:** Store chemicals indoors, away from direct sunlight, sources of heat and egress pathways. Hazardous chemicals must be stored below eye level. Do not store chemicals on the floor, window ledges, or balconies. Keep containers closed unless you are dispensing a chemical or adding to the container. Label containers and be sure container is compatible with the chemicals. Keep out of reach of children.

**BLISTER REPAIR:** Open the blister, crack or small hole with a sharp scraper. Contour the substrate. It should be dry (no more than 3% H2O when checked with a moisture metre). A wet substrate cannot provide permanent bonding. Sand the dry substrate with 60 to 80-grit sandpaper. Remove the loose particles and dust. Clean the substrate with Pettit 120 Brushing Thinner. Apply Ampreg 30 system to the blister cavity laminate to "wet out" exposed fiberglass fibres or matting. Let dry for 3 to 5 hours at 25°C. 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 25°C and then sand it thoroughly with 60 to 80-grit sandpaper. Overcoat repairs with three coats of Pettit Protect 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 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 4°C. At ambient temperatures of 4°C to 12°C, 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 Flexiglas strips or sheets for complicated corner, edge and large hole repairs to ensure a 100% smooth filling.
- The mixture can be coloured by adding paint or pigment pastes. Do not use more paint or pigment than required to obtain the right colour.
- Not all plastics can be bonded together with this product. Always test first. Put some Pettit 97 Epoxy Thinner or 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 overcoating.
- Do not apply polyester gel-coat over FlexPoxy.