

# H<sub>2</sub>Prime

Technical Bulletin 2045 - 08/16

## Water-Based Epoxy Primer

- Modern technology provides lower VOC, low odor, and cleans up with soap and water
- Part of Pettit's no-sand fiberglass system
- Provides excellent adhesion to polyester and vinylester gelcoats, as well as epoxies
- Flexible recoat windows takes the guesswork out of overcoating

## Technical Information



**Part Number:** 4740/4741

**Vehicle:** Waterborne epoxy/polyamide

**Finish:** Flat

**Color:** Light Gray

**Components:** 2

**Mix Ratio:** (A/B): 4 to 1 (by volume)

**Curing Mechanism:** Chemical Cure

**Pot life:** Use within 3 hours

**Induction:** Let mixed primer stand 15 minutes before use

**Solids (theoretical):** 52% by weight

**Coverage:** 350 ft<sup>2</sup>/gal.

**VOC:** <200 g/l (mixed)

**Application Method:** Brush, Roller, or Spray

**Number of Coats:** 1 minimum, up to 3 coats recommended for best results.

**Dry Film Thickness per Coat:** 1.5-2.5 mils (4.5-6.5 mils wet)

**Application Temperatures:** 55°F (13°C) - 95° F (35°C)

**Dry Time @ 70°F (21°C):**

To recoat: 2-3 hours minimum / after 72 hours sanding is required

To overcoat: Overnight minimum required  
**Thinner:** Pettit 140 Water-Based Brushing Thinner

**Cleanup:** Soap and Water



H<sub>2</sub>Prime is a waterborne, two-part epoxy adhesive primer. The low VOC formula is recommended for use above or below the waterline on properly prepared substrates such as epoxy resins, fiberglass, polyester and vinylester gelcoats, wood, concrete, and many previously-painted surfaces. Its tenacious bond to bare fiberglass and most other substrates makes H<sub>2</sub>Prime an excellent under-coater for all Pettit solvent and waterbased topside and antifouling paints. Extended overcoating times provides much easier scheduling and a lower chance of application failure due to missed windows. As a topside primer, H<sub>2</sub>Prime can be easily sanded when cured, effectively filling scratches and imperfections. H<sub>2</sub>Prime will also seal fairing or other filler work prior to top-coating or application of anti-fouling paint.

# H<sub>2</sub>Prime

## Application Information



**Application Information:** H<sub>2</sub>Prime can be easily applied by brush, roller or spray. Use a high quality synthetic bristle brush or short nap roller made for waterborne paints. H<sub>2</sub>Prime has a pot life of 3 hours at 70°F, only mix enough paint for application in that time frame. Thinning is generally not required, but in adverse weather conditions the product may be thinned up to 10% with Pettit 140 Waterbased Brushing Thinner to ease application. Follow the recommended recoat and overcoat dry times carefully. If the maximum recoat or overcoat times are exceeded, sand with 80 to 100-grit sandpaper to insure adhesion of subsequent coats of primer or paint. When sanding, always vacuum or use clean shop air and tack rags to remove sanding residue.

**Surface Preparation:** Coating performance, in general, is proportional to the degree of surface preparation. Follow recommendations carefully, avoiding shortcuts. Inadequate preparation of surfaces will virtually assure inadequate coating performance. Surface must be clean, dry, and free from oil, grease, or wax contaminants to ensure adequate adhesion of H<sub>2</sub>Prime.

**Mixing:** Stir contents of pigmented part B thoroughly to remix any settled material. Mix 4 parts Hardener Part B with 1 part resin Part A by volume and stir thoroughly. Mix only enough material which can be used well within 3 hours @ 70°F. Higher temperatures will reduce pot life, while cooler temperatures will increase pot life. Let mixed primer stand 15 minutes before use.

## Systems

### Previously Painted Surfaces:

Remove any peeling, or flaking coating from the surface to be primed. When previously-coated surface is sound, proceed to surface preparation steps for the appropriate surface listed below for any areas where coating has been completely removed. Sand any remaining painted areas with 120-150 grit sandpaper, remove sanding residue, and proceed with primer application.

### Bare Fiberglass:

All bare fiberglass, regardless of age, should be thoroughly cleaned and de-waxed. Proceed with either Non-Sanding Method or the Sanding Method below.

#### *Non-Sanding Method for Bottom Painting:*

When used with Bio-Blue Surface Prep and Pettit's waterbased antifouling paints, this non-sanding bare fiberglass paint system is VOC compliant in all areas and will not void hull warranties.

1. Thoroughly clean, de-wax, and etch the surface with Pettit 92 Bio-Blue Hull Surface Prep using a medium Scotch-Brite® pad in a swirling motion.
2. Thoroughly rinse all residue from the surface and let dry. Make sure that the entire surface has a dull, frosty finish.
3. Wipe surface to remove any excess moisture and apply one coat of H<sub>2</sub>Prime, following application instructions. H<sub>2</sub>Prime may be overcoated with Pettit antifouling paints up to six months without sanding providing the surface is kept clean and free of contaminants
4. Apply two coats of Pettit antifouling paint following application and dry times on label.

#### *Sanding Method for Bottom and Topside Painting:*

1. Thoroughly clean, de-wax, and etch the surface with Pettit 92 Bio-Blue Hull Surface Prep using a medium Scotch-Brite® pad in a swirling motion or wash the fiberglass at least three times using Pettit D95 Dewaxer.
2. After the surface has been de-waxed, sand thoroughly with 80-grit paper to a dull, frosty finish and rewash the sanded surface with Pettit 120 or 120VOC Brushing Thinner to remove sanding residue.
3. Apply one to three coats of H<sub>2</sub>Prime, following application instructions.
4. Apply two or more coats of Pettit antifouling or topside paint following application and dry times on label.

### Epoxy Resin:

Most epoxy resin systems leave an amine blush on the surface when cured. Amine blush will likely interfere with the adhesion of H<sub>2</sub>Prime.

1. Remove amine blush from surface by using a Scotch-Brite pad with Pettit 92 Bio-Blue Hull Surface Prep or detergent and warm water. Then flush the surface with fresh water.
2. Sand the epoxy surface with 100-120 grit paper and remove sanding residue.
3. Fill surface imperfections with Pettit EZ-Fair. Sand repair areas until smooth using 100-120 grit paper and remove sanding residue.
4. Apply one coat H<sub>2</sub>Prime, following application instructions.
5. Additional coats of H<sub>2</sub>Prime may be necessary to achieve a smooth, uniform surface. Sanding with 220-320 grit paper between coats will help to achieve an even smoother surface.
6. Apply two or more coats of Pettit antifouling or topside paint following application and dry times on label.

Clear epoxy resins used below the waterline must be barrier-coated using Pettit Protect High Build Epoxy Primer to render the bottom as water impermeable as possible. See Pettit Protect User Manual for complete detailed instructions.

### Bare Wood:

The substrate must be clean and dry (verify with moisture meter with levels no higher than 14%). Wood components that have insufficient epoxy sealing are likely to fail due to moisture cycling. Additionally, the substrate must be structurally sound with minimal deflection.

1. Sand the raw wood using 80-100 grit sand paper and remove sanding residue.
2. If a smoother surface is desired, fill surface imperfections with EZ-Fair. Sand repair areas until smooth using 100-120 grit paper wash surface with Pettit 120 or 120 VOC Brushing Thinner to remove sanding residue and let dry. If necessary, repeat EZ-Fair application and sanding until a sufficiently smooth surface is achieved.
3. Apply several coats of H<sub>2</sub>Prime, following application instructions (3-4 coats minimum of H<sub>2</sub>Prime are required to fully seal the wood substrate).
4. Apply two or more coats of Pettit antifouling or topside paint following application and dry times on label.

Bare wood below the waterline can be pre-sealed with marine epoxy resin and barrier-coated using Pettit Protect High Build Epoxy Primer to render the bottom as water impermeable as possible. See Pettit Protect User Manual for complete detailed instructions.