Pettit Protect

PETTIT MARINE PAINT

High Build Epoxy Primer

- Reduces water absorption in fiberglass hulls and prevents osmotic blistering
- Excellent water and chemical resistance.
- High film build for maximum protection with fewer coats.
- Exceptional protection for steel, aluminum, and other metals.
- High Performance System for Underwater Running Gear.

4700/4701 Gray

4100/4101 White

Technical Bulletin 4700 - 12/17

Technical Information

Part Number: 4700/4701
Vehicle: Epoxy/Polyamide
Finish: Low Luster
Color: 4700/4701Gray 4100/4101 White
Components: 2
Mix Ratio: (A/B): 3 to 1 (by volume)
Curing Mechanism: Chemical Cure
Pot life: 2½ hrs. @ 90°F, 5 hrs. @ 70°F, 10 hrs. @ 50°F
Induction: 15 minutes @ 70°F
Solids (theoretical): By weight: 71 ± 2%
By volume: 56 ± 2%
Coverage: 225 ft^2/gal.
VOC:
337 Grams/liter (2.81 lbs./gal) - Part A Only
347 grams/liter (2.89 lbs./gal) - Part B only
340 grams/liter (2.83 lbs./gal) - Parts A and B
Application Method: Brush, Roller, or Spray
Number of Coats: 2 minimum, 3 coats recommended for best results.
Dry Film Thickness per Coat: 4 mils (7.1 wet mils)
Application Temperatures:(air & substrate) 50° F. Min. - 90° F. Max.
Dry Time

To Recoat	To Bottom Paint	To Launch*
90°F 2 hrs-60 days	3-6 hrs	12 hrs min
70°F 3 hrs-60 days	5-8 hrs	24 hrs min
45°F 6 hrs-60 days	7-10 hrs	120 hrs min

Thinner: Pettit 97 Epoxy Thinner

Pettit Protect High Build Epoxy Primer is a heavy duty, two component epoxy coating for use where maximum resistance to fresh or salt water is required. It reduces water absorption in fiberglass hulls, making it an excellent choice for the prevention and repair of osmotic blisters. Pettit Protect's high-solids formula allows for quicker and easier application with fewer coats necessary for effective protection. Pettit Protect also provides dependable corrosion protection on steel, aluminum, and all other underwater metals. It is ideally suited for commercial and pleasure craft applications and has excellent durability. Pettit Protect white 4100/4101 offers all the benefits of gray Pettit Protect High Build Epoxy Primer in a white color that will not bleed through even the lightest colored bottom paints. Specifically designed for use below white and light colored Vivid bottom paints, its use reduces the number of finish coats needed to achieve full color. Pettit Protect has excellent durability in exterior exposures, although, like most epoxies, it will chalk if not top coated.

www.pettitpaint.com - (800) 221-4466

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Application Information

Application Information: Pettit Protect can be easily applied by brush, roller or spray. Use a high quality bristle brush or 3/8" nap roller made for epoxy paints. Pettit Protect has a pot life of 5 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 97 Epoxy 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 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 Pettit Protect.

Mixing: Stir or shake contents thoroughly to remix any settled material. Mix 3 parts Part A with 1 part Part B by volume and stir thoroughly. Mix only enough material which can be used well within 5 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 Primed Surfaces:

Pettit Protect may be applied over existing two part epoxy finishes, provided they are in sound condition. Brush-off sandblasting or very heavy sanding with 60 grit sandpaper is required to maintain maximum adhesion. Then apply two to three coats* of Pettit Protect per instructions. All existing two package epoxy finishes in poor condition, as well as one package primers and bottom paints, should be removed completely.

Bare Fiberglass: *No Sand Priming System for New or Unpainted Fiberglass Hulls (Non-Barrier Coat Method)*

All bare fiberglass, regardless of age, should be thoroughly cleaned and de-waxed. Pettit Protect can be used as an effective one-coat no-sand priming system.

1. Thoroughly clean, de-wax, and etch the surface with Pettit 92 Bio-Blue Hull Surface Prep using a medium Scotch-Brite® pad or 3m Doodlebug®. Thoroughly rinse all residue from the surface and let dry. Ensure entire surface has a dull, frosty finish.
2. Apply one coat of Pettit Protect following application and dry times on label. Wet Film Thickness (WFT) should be seven (7) mils per coats, which yields four (4) mils Dry Film Thickness (DFT).
3. Apply two coats of Pettit antifouling paint following application and dry times on label. (Make sure the Pettit Protect is still thumbprint tacky for first coat of bottom paint.)

Bare Fiberglass: *Preventative Maintenance of New or Non-Blistered Hulls (Barrier Coat Method)*

1. Thoroughly clean and de-wax the surface with Pettit 92 Bio-Blue Hull Surface Prep using a medium Scotch-Brite® pad or 3M Doodlebug®. Thoroughly rinse all residue from the surface and let dry.
2. Sand the gelcoat thoroughly with 80 grit production sand paper. All surfaces should be a uniform dull, frosty finish. Inadequate sanding of the surface will result in eventual failure of paint adhesion.
3. Apply a minimum of 2 coats Pettit Protect following instructions carefully. WFT should be 7 mils per coat, which yeilds 4 mils DFT. Dry film thickness for 2 coat application will be 8 mils, 3 coat application should be 12 mils minimum DFT.

Blistered Fiberglass:

Refer to Pettit Protect User Manual or Technical Bulletin TB1000 "Gelcoat Blister Repair and Prevention" for detailed instructions.

Bare Steel:

Sandblast to SSPC-SP 6 Commercial blast, blow off residue with clean, compressed air, and immediately apply three coats* of Pettit Protect following application and recoat instructions. Alternatively, hand sand with 80 grit sandpaper or power hand tool clean, then remove residue with clean compressed air or by vacuuming. Immediately apply one coat of Pettit 6980 Rustlok Steel Primer and let dry to a tack free state (usually 30 minutes to 2 hours, dependent on temperature). Then apply three coats of Pettit Protect following application and recoat instructions. Do not let Rustlok Primer dry longer than 2 hours under any circumstances before applying Pettit Protect.

Bare Aluminum:

Sandblast (using non-metallic media) or disc sand the aluminum to clean, bright metal. Wipe clean of residue and immediately apply one thin coat of Pettit 6455/044 Metal Primer. Let dry 8 hours minimum, 48 hours maximum, and apply three coats* Pettit Protect following application and recoat instructions.

Keels - Lead:

Disc sand or otherwise abrade surface to bright metal; clean off residue. Apply one thin coat of 6455/044 Metal Primer and allow to dry eight hours. Apply one coat of Pettit Protect. Let dry to recoat. Then, if fairing is required, apply Pettit 7050 EZ-Fair Epoxy Fairing Compound. Sand smooth with 80 grit sandpaper and follow with two additional coats of Pettit Protect per label directions.

Keels - Steel or Cast Iron:

Disc sand or otherwise abrade surface to bright metal and clean off residue. Apply one coat of 6980 Rustlok Steel Primer, allowing to dry only ½ - 2 hours prior to overcoating, no more, no less! Apply one coat of Pettit Protect. Let dry to recoat. Then, if fairing is required, apply Pettit 7050 EZ-Fair Epoxy Fairing Compound. Sand smooth and follow with two additional coats of Pettit Protect per label directions.

*Total dry film thickness is more important than the actual number of coats applied. On metal and fiberglass, if 8 mils total DFT is not achieved with two or three coats, additional coats are recommended until 8 - 12 mils total DFT is achieved.

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Application Information

Spray Application Information: Pettit Protect can be easily applied by spray. Mix part A with part B in the appropriate ratio. Allow to induct for 10-15 mins. Add up to 10% Pettit Epoxy Thinner # 97.

Spray Recommendations:

Pressure Pot System

Pot Setup:
Pressure pot guage should be set 15 - 25 PSI.
A test stream should be preformed with no air pressure to achieve 16 - 20 oz. peroduct/per minute or 2 - 3 ft. stream

Conventional Gun Setup:
Binks or equivalent
Gun Pressure: 40 - 55 PSI
Fluid Needle/ Nozzle: 1.6 - 2.0 mm (.065" - .80")

HVLP Gun Setup:
SataJet 1000B HVLP or equivalent
Gun Pressure: 25 - 32 PSI
Fluid Needle/ Nozzle: 1.8 - 2.2 mm (.072" - .090")

Not recommended to be sprayed by conventional gravity feed cup gun.

Airless/ Air Assisted Setup:
Binks or equivalent
40 - 1 Pump: 50 - 60 PSI pump guage pressure
25 - 1 Pump: 70 - 80 PSI pump gauge pressure
Orifice Size: .015" - .024"

If using airless/ air assisted equipment, introduce 20 - 40 PSI of air to allow for uniform pattern and particle size.