



# The Protector<sup>®</sup>

High Copper, Low VOC, Hard Antifouling

**TECHNICAL BULLETIN P225W 08/13**

- High copper load offers excellent performance in all conditions
- Hard durable finish is easily burnished
- Meets 330 gram per liter VOC regulations
- Excellent adhesion to fiberglass, wood and steel hulls
- Left In the water, The Protector<sup>®</sup> provides classic year-round service



The Protector has earned its solid reputation by providing excellent, long lasting protection, even under the toughest antifouling conditions. It contains the highest copper load in the Z-Spar line. The Protector provides dependable antifouling protection for up to two years of in-water service while meeting the 330 gram per liter VOC regulations. A good choice for powerboat or sailboat use in tropical and other warm waters where extreme fouling exists. The Protector's hard epoxy base provides a durable finish that is easily burnished to a smooth racing finish . Compatible with most finishes. (Available on the West Coast Only)



B-90 Red



B-91 Blue



B-94 Black

Note: Color differences may occur between actual and color chips shown

PHYSICAL DATA	APPLICATION DATA	ASSOCIATED PRODUCTS
VEHICLE TYPE: Modified Epoxy/Rosin FINISH: Flat COLORS: B-90 Red B-91 Blue B-94 Black COMPONENTS: 1 CURING MECHANISM: Solvent Release SOLIDS (theoretical): By weight...839 +/- 2% By volume...62 +/- 2% COVERAGE: 500 sq. ft/gal. (includes 20% loss factor) VOC: 330 g/l max. (as supplied and applied) ACTIVE INGREDIENTS: Cuprous Oxide 53.5% FLASH POINT: 115°F (SETA)	METHOD: Brush, roller, airless or conventional spray. NUMBER OF COATS: 2 DRY FILM THICKNESS PER COAT: 2 mils (3.3 wet mils) APPLICATION TEMP: 40° F. Min. / 90°F. Max. DRY TIME* (HOURS): To Recoat    To Launch 90°F               2               8 70°F               4               16 40°F               6               24 *The above dry times are minimums. The Protector Antifouling may be recoated after the minimum time shown and launched up to 60 days after painting. THINNER: 120 Brushing Thinner 121 Spray Thinner	120 Brushing Thinner 121 Spray Thinner 92 Bio-Blue Hull Surface Prep 95 Fiberglass Dewaxer 6998 Skip-Sand Primer 4100/4101 White Pettit-Protect High Build Epoxy Primer 4700/4701 Gray Pettit-Protect High Build Epoxy Primer 6455/044 Metal Primer 6627 Tie-Coat Primer 6980 Rustlok Steel Primer 7050 EZ-Fair Epoxy Fairing Compound



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The Protector is heavily loaded with cuprous oxide. As a result of this there is a tendency for settling to occur, especially if the paint has been on the shelf for several months. It is necessary to thoroughly mix the paint before using. If possible shake the can of paint on a mechanical paint shaker. Before using check the sides and bottom of the can to make sure all the pigment has been mixed in. If mixing is going to be done with a wooden paddle or an electric drill mixer, pour off half of the liquid from the top of the can into another can and then properly mix in any settled pigment; then remix the two parts together thoroughly. Adhere to all application instructions, precautions, conditions and limitations to obtain optimum performance. Refer to individual labels and tech sheets for detailed instructions when using associated products, etc. Thinning of The Protector is not necessary. However, in very warm, breezy conditions a small amount of thinner (no more than 6 ounces per gallon) may be added to aid in application. In areas where pollution control regulations limiting the amount of VOC (Volatile Organic Compounds) to 330 grams/liter are in effect do not thin The Protector more than 2% (2.5 ounces per gallon).

## 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.

## Maintenance

No antifouling paint can be effective under all conditions of exposure. Man made pollution and natural occurrences can adversely affect antifouling paint performance. Extreme hot and cold water temperatures, silt, dirt, oil, brackish water and even electrolysis can ruin an antifouling paint. Therefore, we strongly suggest that the bottom of the boat be checked regularly to make sure it is clean and that no growth is occurring. Lightly scrub the bottom with a soft brush to remove anything from the antifouling paint surface. Scrubbing is particularly important with boats that are idle for extended periods of time. The coating is most effective when the boat is used periodically.

## SYSTEMS

Mix paint thoroughly to ensure toxicants are evenly dispersed throughout the can. All surfaces must be clean, dry and properly prepared prior to painting.

**Do not apply The Protector on aluminum.**

**Previously Painted Surfaces:** If the previous coating is in good condition, thoroughly sand with 80 grit paper then solvent clean with 120 Brushing Thinner to remove residue. Apply two finish coats of The Protector. If the previous coating is soft or in poor condition, remove to the bare surface by sanding or using paint remover. Proceed with appropriate bare system as described below. Old tin copolymers should be removed or sealed with Pettit 6627 Tie Coat Primer before applying The Protector Antifouling.

**Bare Fiberglass:** All bare fiberglass, regardless of age, should be thoroughly cleaned with 92 Bio-Blue Hull Surface Prep or de-waxed several times with Pettit D-95 Dewaxer. Sand thoroughly with 80 grit sandpaper to a dull, frosty finish and rewash the sanded surface with 120 Brushing Thinner to remove sanding residue. Then apply two or three thin coats of this product, following application instructions. Careful observation of application instructions will help ensure long term adhesion of this and subsequent years' antifouling paint.

To eliminate the sanding operation, two methods are available:

1. Prep the surface with 92 Bio-Blue Hull Surface Prep or wash the fiberglass three times using Pettit D95 Dewaxer. Then apply one thin coat of Pettit 6998 Skip-Sand Primer. Use a 3/16" or less nap when applying by roller. Consult the primer label for complete application and antifouling top coating instructions. Apply two or three thin coats of this product.
2. Thoroughly clean, de-wax and etch the surface with 92 Bio-Blue Hull Surface Prep using a course Scotch-Brite pad in a swirling motion. Thoroughly rinse all residue from surface and let dry. Then apply one coat of Pettit 4700/4701 High Build Epoxy Primer. Consult the primer label for complete application and antifouling top coating instructions. Apply two or three thin coats of this product.

**Barrier Coat:** Fiberglass bottoms potentially can form osmotic blisters within the gelcoat and into the laminate. To render the bottom as water impermeable as possible, prepare the fiberglass surface as mentioned above (sanding method) then apply three coats of Pettit Protect 4700/4701 Gray High Build Epoxy Primer or three coats of Pettit Protect 4100/4101 White High Build Epoxy Primer per label directions. Apply two or three thin finish coats of this product.

**Blistered Fiberglass:** See Pettit Technical Bulletin TB-1000 Gelcoat Blister Repair and Prevention Specification for detailed instructions.

**Bare Wood:** Sand entire surface with 80 grit paper; wash clean with 120 Brushing Thinner. Apply a coat of The Protector thinned 25% with 120 Brushing Thinner, allow an overnight dry, lightly sand and wipe clean. Apply two finish coats of The Protector.

**Bare Steel\*:** Sandblast or disc sand to a clean, bright finish remove residue. Then either immediately apply two coats of 6980 Rustlok Steel Primer, allowing each to dry only 1-2 hours prior to over coating - OR - immediately apply one thin coat of 6455 Metal Primer and allow to dry two hours; follow with two coats of 6627 Tie Coat Primer, allowing each to dry two hours minimum. Apply two finish coats of The Protector.

**Keels - Lead:** Abrade surface to bright metal; clean off residue. Apply one thin coat of 6455/044 Metal Primer; allow to dry two hours. Apply one coat of Pettit 6627 Tie Coat Primer then, if fairing is required, apply 7050 EZ-Fair Epoxy Fairing Compound. Follow with an additional coat of 6627 Tie Coat Primer per label directions. Apply two finish coats of The Protector.

**Keels - Steel or Cast Iron:** Abrade surface to bright metal; clean off residue. Apply one coat of 6980 Rustlok Steel Primer, allowing to dry only 1 - 2 hours prior to over coating. Then, if fairing is required, apply 7050 EZ-Fair Epoxy Fairing Compound followed by one coat of Pettit 6627 Tie Coat Primer, finish with two finish coats of The Protector.

\*This is a simplified system for smaller areas designed for good performance and easy application by the boatyard professional or do-it-yourselfer. For larger vessels or for applications where a high performance, professional system is desired, please consult your local Pettit representative or the Pettit