

BIOCOP TF[™] Technical Data Sheet

Revision date: April 2019

Maximum Performance for All Vessels

- Advanced dual biocide PL3 release technology
- Maximum protection available
- 38.06% Cuprous Oxide
- Multi-season protection
- TBT-Free Lloyd's Registry certified



Advanced Dual Biocide

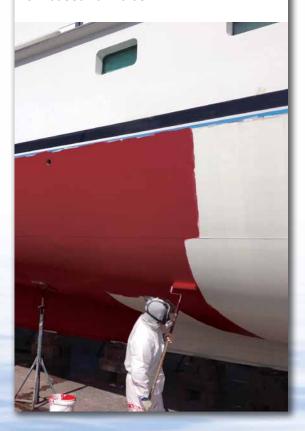
1200-1 Series





PRODUCT DESCRIPTION

Biocop TF was developed as an alternative to tin-based antifouling paints to protect against the harshest marine environments. Using the newest biocide technology, a revolutionary polymer binder system "PL3" produces an engineered dual biocide release that leaves no harmful effects on the environment. The result is a multi-season self-polishing paint that provides equivalent protection to tin-based formulas.



PRODUCT INFORMATION

Colors: Red 1201-1, Light Blue 1202-1, Black 1205-1,

Dark Blue 1230-1, Gray 1231-1, Green 1234-1

Finish/Sheen: Semi-Gloss

Biocide Content: 4.14% (78 g/l)

Copper Content: 38.06% (717 g/l) all colors

Volume Solids: $57\% (\pm 2)$ Solids by Weight: $80\% (\pm 2)$

Shipping Weight: Black - 15.76 Lbs/Gal (7.15 kg/Gal)

Blue - 15.76 Lbs/Gal (7.15 kg/Gal) Red - 15.76 Lbs/Gal (7.15 kg/Gal) Dark Blue - 16.0 Lbs/Gal (7.257 kg/Gal) Green - 15.76 Lbs/Gal (7.15 kg/Gal) Gray - 17.45 Lbs/Gal (7.915 kg/Gal) Teal - 15.67 Lbs/Gal (7.107 kg/Gal) *All colors are not available in all states

Flash Point: 100°F (38°C) **VOC:** 377 Grams/Liter

Typical Film Thickness:

Pleasure craft: 3.0 mils (76.2 μ) dry film thickness(DFT) per coat, (5.3 mils (134.62 μ) wet film thickness(WFT)), 2 coats on entire hull and a 3rd at the waterline and other high wear areas.

Pleasure craft (California/Reduced CU₂O Leach Rate Application): 3.0 mils (76.2 μ) dry film thickness (DFT) per coat, (5.3 mils (134.62 μ) wet film thickness (WFT)), 2 coats on entire hull.

Commercial Marine: 4.0-5.0 mils (101.6-127 μ) DFT per coat by spray application (7.0-8.8 mils (177.8-223.52 μ) WFT), 2 coats on entire hull and a 3rd at the waterline and other high wear areas.

Theoretical Coverage: 315 Sq.Ft./Gal. (29.2645 m²) @ 2.9 mils (73.66 μ) DFT.

FEATURES & BENEFITS

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- Advanced Dual Biocide PL3 Release Technology for Longer Life
- Harder, Self-Polishing Polymer Binding System
- Highest Grade of Cuprous Oxide Available
- Better Color Consistency for Color Matching
- Provides Maximum Fouling Protection as TBT Type Products
- Lloyd's Register certified (TBT-FREE)

APPLICATION CONTROLS

Method: This product may be applied by airless and conventional spray, solvent resistant rollers and brushes.

Dry Times and Overcoating Intervals:

Substrate Temp.	Touch Dry	Overcoating Time		Launch
Temp F° (C°)	Min	Min	Max	Min
73°F (23°C)	2 hrs	1 hrs	N/A	12 hrs
95°F (35°C)	1 hrs	1 hrs	N/A	12 hrs

Please contact your Sea Hawk representative for Commercial Marine application and overcoating dry times.

SURFACE PREPARATION

Paint only clean, dry surfaces. Remove all grease, oil, wax, or other foreign material by solvent or detergent washing. (SSPC-SPI)

Compatibility: For pleasure craft applications, please refer to our Sea Hawk Compatibility Chart to ensure compatibility when applying Biocop TF antifouling paint over existing bottom paint.

Previously Painted Surfaces: Biocop TF is suitable for this substrate. For correct procedures please refer to the Application Guidelines for Fiberglass/Gelcoat.

Fiberglass or Vinyl Ester Hulls: Biocop TF is suitable for this substrate. For correct procedures please refer to the Application Guidelines for Fiberglass/Gelcoat.

Wood Surfaces: New Work - Sand the wood surface with 80 grit sandpaper, remove the sanding dust with Sea Hawk S-90 Cleaner, allow to dry and apply

the first coat of Biocop TF bottom paint. Reduce the first coat (only) 20% with Sea Hawk 2033 Thinner to maximize surface penetration. Next, apply whatever seam compound if needed, allow to dry in accordance with the product label and apply two more coats of Biocop TF without any Thinner reduction.

Aluminum: Biocop TF Antifouling paint may be used on an aluminum hull only when used with the proper barrier coat system described in Technical Bulletin AL1284. Biocop TF is not to be used on bare aluminum.

Steel Vessels: Sea Hawk Biocop TF antifouling paint is normally used as part of a paint system for underwater hull areas on steel vessels. Nominally, Biocop TF is applied over a properly cleaned existing surface of another antifouling paint or sealer. The surface must be clean and dry prior to application, free of all surface contamination. We highly recommend the hull bottom be high pressure water washed immediately upon haul out with 2,500-3,000 psi clean fresh water. Some areas may need to be cleaned in accordance with SSPC-SP-1 Solvent Cleaning to ensure all oils, grease, and other contaminants are removed. Please refer to additional data below and the section on recommended systems for steel below.

Additional Data For Painting Steel Hulls: If the surface to be painted is also to be repaired with an epoxy primer system, we recommend the area first be grit blasted to SSPC-SP-10 "near white metal", cleaned free of dust and blast media and primed in accordance with the primer system specifications. Please refer to the specified primer data sheet for application details. Make sure the first coat is applied within the proper over coating window of the last coat of epoxy primer which is normally while the epoxy is still tacky but cannot be removed with the thumb. Apply at least two coats of antifoulant for best performance.

Application Data

Mixing: Biocop TF antifouling paint contains a moderate concentration of copper oxide and may have settled in transit. Product must be thoroughly mixed with power mixer/shaker until uniform.

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Induction Time: Not Applicable

Thinning: If necessary, maximum 10% with Sea

Hawk 2033, 2035

Cleaning: Sea Hawk 2033, 2035, Xylene

Pot Life: Not Applicable

Brush/Rolling: Solvent Resistant Roller Cover 3/8" (10 mm) pile (nap), smooth to medium. Prewash roller cover to remove loose fibers prior to use.

Airless Spray: Minimum 33:1–2 GPM ratio pump; "0.017-0.026" (0.43-0.66 mm) orifice tip; 3/8" ID high-pressure material hose; 90 PSI line pressure; 60 mesh filter.

Conventional Spray: Please contact your Sea Hawk representative for more specific information.

Safety: Prior to use, obtain and consult the "Safety Data Sheet" of this product for health and safety information. Read and observe all precautionary notices on container labels.

LIMITATIONS:

Apply in good weather when air and surface temperatures are above 50°F (10°C). Surface temperature must be a least 50°F (10°C) above dew point. For optimum application properties, bring material to 70-80°F (21-27°C) temperature range prior to mixing and application. Unmixed material (in closed containers) should be maintained in protected storage between 40° and 100°F (4-38°C). Prolonged atmospheric exposure of this product may detract from performance. Technical and application data herein is for the purpose of establishing a general guideline of the coating and proper coating application procedures. As application, environmental and design factors can vary significantly due care should be exercised in the selection, verification of performance, and use of the coating.