

## TotalBoat Aluminum Boat Barrier Coat - Tech Data Sheet

### SUPPORT PRODUCTS:

**Reducer:** TotalBoat Epoxy Primer Thinner 200 (brush, roll, or spray application)

**Cleanup:** TotalBoat Epoxy Primer Thinner 200 or TotalBoat Dewaxer & Surface Prep

**Surface Prep Solvents:** TotalBoat Dewaxer & Surface Prep

**Aluminum Etch (Optional):** Aluminum Boat Etch Wash

### COMPATIBLE SUBSTRATES:

**Aluminum:** Yes

**Previously Painted Surfaces:** Yes (not over 1-part paints). **Always test the previous paint to verify it is not a 1-component paint.**

### SURFACE PREPARATION:

**Bare Aluminum:** \*Sandblast (using non-metallic media) or disc sand the aluminum to clean, bright metal.

\* Remove all sanding or blasting residue (sweep, brush, or vacuum).

\* Wipe clean with a clean, lint-free cotton rag dampened with TotalBoat Dewaxer & Surface Prep. Allow the solvent to evaporate.

\* TotalBoat Aluminum Boat Etch Wash is not required, but can be used, as directed, immediately after sanding/grinding to maximize the bond to the aluminum.

\* Dry the metal completely.

\* Apply TotalBoat Aluminum Boat Barrier Coat within 1 hour of completing the metal preparation. If the metal has time to oxidize to a dull finish, Aluminum Boat Barrier Coat will not adhere properly.

**Previously Painted Surfaces:** \* Always verify that you are not attempting to overcoat a 1-component paint.

\* Always ensure that the previous coating has cured completely.

\* Wipe clean with a lint-free cheesecloth or rag dampened with TotalBoat Dewaxer & Surface Prep.

\* Sand the surface with 80-grit sandpaper. Remove all sanding residue.

\* Wipe clean with a lint-free cheesecloth or rag dampened with TotalBoat Dewaxer & Surface Prep.

\* Apply Aluminum Boat Barrier Coat.

**Aluminum Boat Barrier Coat over** \* Wash with soap and water.

**Previous Aluminum Boat Barrier Coat** \* Rinse with fresh water and allow to dry.

**(more than 60 days from last** \* Sand the surface with 80-grit sandpaper.

**application of Aluminum Boat Barrier**

**Coat):**

\* Wipe clean with a lint-free cheesecloth or rag dampened with TotalBoat Dewaxer & Surface Prep.

\* Apply Aluminum Boat Barrier Coat.

**Antifouling over Aluminum Boat** \* WATER-BASED ANTIFOULING PAINT: Aluminum Boat Barrier Coat must be fully cured and sanded before applying any water-based antifouling paint (including but not limited to TotalBoat JD Select, Pettit Hydrocoat, Interlux Bottomkote Aqua).

**Barrier Coat:** \* SOLVENT-BASED ANTIFOULING PAINT: The "Thumbprint" method is the best for adhesion, and saves time. After applying the last layer of Aluminum Boat Barrier Coat, wait until it does not stick to your thumb, but you can make a thumbprint, or within the "overcoat window"—apply antifouling paint. If this window is missed, the surface must be sanded before applying paint.

\* TEFLON™ OR VINYL PAINTS: When using Teflon or vinyl-based racing antifouling paints, Aluminum Boat Barrier Coat must be fully cured for 24 hours and sanded before applying antifouling paint.

#### ▶ \* WHAT IS THE THUMBPRINT METHOD?

\* Touch the Aluminum Boat Barrier Coat film with your thumb. If the Aluminum Boat Barrier Coat does not stick to your thumb, but you can make a thumbprint, you are within the "overcoat window". Apply antifouling paint.

\* If Aluminum Boat Barrier Coat sticks to your thumb, it is too soon to apply antifouling paint.

\* If you can't leave a thumbprint, you have missed the overcoat window. Sand with 80-grit sandpaper or apply another coat of Aluminum Boat Barrier Coat. Use the "Thumbprint" method again.

### APPLICATION:

**MIXING:** 1. The Base and Curing Agent must each be shaken or stirred **thoroughly** prior to mixing.

2. Mix TotalBoat Aluminum Boat Barrier Coat properly in a 3:1 mix ratio by volume. If the whole container will be mixed at one time, simply pour the full can of Curing Agent into the Base can and stir until both components are mixed thoroughly. **DO NOT ADD ANY THINNER** until the induction period has been completed.

3. Stir thoroughly for at least five minutes, ensuring that both components are completely mixed together. Be sure to scrape the bottom and sides of the mixing container while mixing to ensure proper cure and application properties.

**Induction Period:** After mixing thoroughly, allow a 15-minute induction period before any reduction and application.

4. Apply only when rain, dew, and temperature conditions will not affect application or cure of Aluminum Boat Barrier Coat.

**BRUSH/ROLLER APPLICATION:** \* Thinning should not be required for most applications, but Aluminum Boat Barrier Coat can be thinned with TotalBoat Epoxy Primer Thinner 200, as needed (10% maximum).

\* Apply Aluminum Boat Barrier Coat. Use a high-quality natural bristle, solvent-safe brush for the best results when brushing. When rolling, use a 3/8" nap or foam solvent-safe roller cover.

**SPRAY APPLICATION:** \* TotalBoat Aluminum Boat Barrier Coat can be easily applied by spray. Mix part A with part B in the appropriate ratio.

\* Allow the mixture to induct for 10-15 minutes.

\* After the induction process, the mixture can be thinned up to 10%, using TotalBoat Epoxy Primer Thinner 200.

**PRESSURE POT SYSTEM:** The pressure pot gauge should be set 15-25 PSI. A test stream should be performed with no air pressure to achieve 16-20 oz. of product 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 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 using conventional gravity feed cup guns.

**AIRLESS/AIR ASSISTED:** Binks or equivalent: 40-1 Pump: 50-60 PSI pump gauge 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.

**FOR ALL SUBSTRATES:** The minimum application of Aluminum Boat Barrier Coat is 2-3 coats to ensure that the dry film thickness is at least 8-12 mils to ensure a proper barrier coat. Failure to apply proper mil thickness may result in coating failure, or potential water permeation.

**Overcoating with Aluminum Boat Barrier Coat:** TotalBoat Aluminum Boat Barrier Coat can be recoated over itself for up to 60 days. If that time window is missed, sand with 80-grit sandpaper, and wipe the surface clean with a clean, lint-free cotton rag wetted with TotalBoat Dewaxer & Surface Prep, and allow the solvent to evaporate completely. Recoat with Aluminum Boat Barrier Coat.

**Overcoating with Antifouling Paint:** For best adhesion, use the "Thumbprint" method, as mentioned above. Overcoat with antifouling paint within the specified time window posted below. If the specified overcoat window for antifouling paint is missed, wait 24 hours and sand with 80-grit sandpaper, then wipe the surface clean with TotalBoat Dewaxer & Surface Prep. Allow the solvent wipe to evaporate completely before applying any paint.

**IMPORTANT:** Application of antifouling paint over Aluminum Boat Barrier Coat is critical.

**APPLICATION DATA:**

**Application Method:** **Brush:** (natural bristle, solvent safe)  
**Roll:** (3/8" nap or foam solvent-safe roller cover)  
**Spray:** Conventional, airless, HVLP

**Number of Coats:** 2-3 (minimum)  
It is more important to ensure 8-12 mils of dry film thickness than a certain number of coats. More than three coats may be required based upon the application thickness.

**Induction Time:** 15 Minutes @ 70°F

**Film Thickness (per Coat):** 4 mils dry (7 mils wet)  
**Pot Life:** 2.5 hrs @ 90°F  
5 hrs @ 70°F  
10 hrs @ 50°F

**Application Temperature:** 50-90°F (0-85% RH)

**Dry Time to Recoat with more Aluminum Boat Barrier Coat:** 2 hrs - 60 days @ 90°F  
3 hrs - 60 days @ 70°F  
6 hrs - 60 days @ 50°F

**Dry Time to Overcoat with Antifouling Paint:** 3-6 hrs @ 90°F  
5-8 hrs @ 70°F  
7-10 hrs @ 50°F

**Dry time to Launch (Minimum):** 12 hrs @ 90°F  
24 hrs @ 70°F  
5 days @ 50°F

**Recommended Finish Coating:** Ablative antifouling paint

**PHYSICAL DATA:**

**Vehicle Type:** Epoxy resin  
**Components:** 2: Base and Curing Agent  
**Mix Ratio by Volume:** 3:1 (3 Parts Base to 1 Part Curing Agent)

**Reducer (Optional - Brush or Spray):** TotalBoat Epoxy Primer Thinner 200  
\*\* A maximum of 10% reducer can be added \*\*

**Finish:** Matte  
**Color:** Gray

**Solids (by Weight) +/- 2%:** 71%  
**Units of Measure:** Quart Kit: 3/4 quart of Base, 1/2 pint Curing Agent  
Gallon Kit: 3/4 gallon of Base, 1 quart Curing Agent

**Theoretical Coverage (sq ft/gal):** 225 sq. ft. (at 7 mils wet, not accounting for waste)

**Viscosity @ 75°F (KU):** 82  
**VOC Content (g/L):** 337 (Part A), 347 (Part B), 340 (Parts A and B Admixed)

CREATION DATE: April 9, 2020

