

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	High performance, tin-free, polishing antifouling
<b>Description</b>	High copper loading, tin-free antifouling utilizing an engineered binder matrix resulting in a controlled and effective release of biocide during operation over extended service periods. It provides long term protection and fuel efficiency in harsh marine environments.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Provides long-term, fuel efficient protection</li> <li>• VOC compliant</li> <li>• Fast dry, high production application characteristics</li> <li>• Indefinite maximum recoat interval</li> <li>• Compatible with a wide range of antifouling</li> <li>• Meets IMO standards as a TBT-Free Anti-Fouling System, (Lloyds Registry)</li> </ul>
<b>Color</b>	Red and Black
<b>Finish</b>	Flat
<b>Dry Film Thickness</b>	4 - 6 mils (102 - 152 microns) per coat Two coats minimum - a third coat optional for even longer service.
<b>Solids Content</b>	By Volume 55% +/- 2%
<b>Theoretical Coverage Rate</b>	882 ft <sup>2</sup> /gal at 1.0 mils (21.7 m <sup>2</sup> /l at 25 microns) 221 ft <sup>2</sup> /gal at 4.0 mils (5.4 m <sup>2</sup> /l at 100 microns) 147 ft <sup>2</sup> /gal at 6.0 mils (3.6 m <sup>2</sup> /l at 150 microns) Allow for loss in mixing and application.
<b>VOC Values</b>	<p><b>As Supplied</b> : 3.34 lbs./gal (400 g/l) Thinner 236 E : 12.8 oz 3.34 lbs./gal (400 g/l)</p> <p><b>EPA Method 24</b> These are nominal values and may vary with color</p>

## SUBSTRATES & SURFACE PREPARATION

<b>General</b>	Surfaces <u>must</u> be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
<b>Steel</b>	Steel <u>must</u> be primed with appropriate primer as recommended for the application.
<b>Fiberglass</b>	Should be cleaned several times with a fiberglass de-waxer. Sand with 80-grit paper or equivalent to a dull, frosty appearance. Re-wash surface to remove sanding residue and apply 2-3 coats of antifouling.

## MIXING & THINNING

<b>Mixing</b>	This product contains a high level of cuprous oxide. As a result, there is a tendency for settling to occur. It is necessary to thoroughly power mix before using. Check the bottom and sides of the can to ensure all the pigment has been mixed in. It is recommended to pour off half the liquid into a second container and thoroughly mix in any settled pigments. Then remix the two parts together again. Stir occasionally during use to redistribute any settling that may occur during application.
<b>Thinning</b>	Normally not required. May be thinned up to 10% with Thinner #236E (exempt thinner).

**MIXING & THINNING**

Pot Life | Indefinite

**APPLICATION EQUIPMENT GUIDELINES**

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

**Spray Application (General)** | The following spray equipment has been found suitable and is available from manufacturers. Prior to use, flush all equipment with Thinner #2.

**Conventional Spray** | Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.070" I.D. fluid tip and appropriate air cap.

**Airless Spray** | Pump Ratio: 30:1 (min.)\*  
 GPM Output: 3.0 (min.)  
 Material Hose: 3/8" I.D. (min.)  
 Tip Size: .017-.019"  
 Output PSI: 1700-2100  
 \*PTFE packings are recommended and available from the pump manufacturer.

**Brush & Roller (General)** | Spray application is recommended. However, application by roller is acceptable. Use a short nap mohair roller with phenolic core. Avoid rerolling. Take care to apply uniform coats.

**APPLICATION CONDITIONS**

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	40°F (4°C)	40°F (4°C)	0%
Maximum	90°F (32°C)	90°F (32°C)	90°F (32°C)	95%

**Do not apply when the surface temperature is less than 5°F (3°C) above the dew point.** Special thinning and application techniques may be required above or below normal application conditions.

**Special Note:** Antifoulants are typically applied over epoxy anti-corrosive coatings. The optimum time to topcoat with an antifoulant is when the epoxy is "touch-tacky". If the touch-tacky time has been exceeded you can generally reprime/refresh the first coat of epoxy with a fresh coat of itself (check specific data sheet). The longer the epoxy has to cure, particularly in sunlight exposure or elevated temps, the higher risk of inadequate adhesion. **If those maximum recoat times have been exceeded, the surface must be abraded by sweep blasting or sanding prior to the application of additional coats. Contact your local Carboline Marine Representative for assistance/guidance.**

**CURING SCHEDULE**

Surface Temp.	Cure for Service	Dry to Recoat
40°F (4°C)	24 Hours	12 Hours
50°F (10°C)	18 Hours	8 Hours
70°F (21°C)	12 Hours	6 Hours
90°F (32°C)	10 Hours	5 Hours

These times are based on a 4.0 mil (50 micron) dry film thickness and 40-60% relative humidity. Higher film thicknesses, insufficient ventilation, high humidity or cooler temperatures will require longer cure times. The above times are minimum cure times.

**CLEANUP & SAFETY**

Cleanup | Use Thinner #2.

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## CLEANUP & SAFETY

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**Safety** | Read and follow all caution statements on this product data sheet and on the SDS for this product.

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## PACKAGING, HANDLING & STORAGE

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**Shelf Life** | 12 months at 75°F (24°C)

**Storage Temperature & Humidity** | 40° -100°F (4°-38°C)  
0-90% Relative Humidity

**Storage** | Store Indoors.

**Shipping Weight (Approximate)** | **5's**  
92 lbs

**Flash Point (Setaflash)** | 765°F (18°C)

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## WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated.