SEAGUARD® ABLATIVE ANTIFOULING COATING

PRODUCT INFORMATION

9.12

PRODUCT DESCRIPTION

SEAGUARD ABLATIVE ANTIFOULING COATING is an advanced antifouling coating based on a polyamide polymer containing cuprous oxide. Recommended for the underwater surfaces of steel vessels operating in all coastal and oceanic waters. This product maintains an effective, bio-active surface during its entire life.

- Long Life
- Brush, roll, or spray application
- A tin-free ablative coating
- Complies with the requirements of MIL-PRF-24647

PRODUCT CHARACTERISTICS

Finish: Flat
Color: Red, Black, and Blue
Volume Solids: 65\% \pm 2\%
VOC (EPA Method 24): \(<400 \text{ g/L; 3.33 lb/gal, maximum}\)

Recommended Spreading Rate per coat:

<table>
<thead>
<tr>
<th>Wet mils (microns)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0 (100)</td>
<td>7.0 (175)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dry mils (microns)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 (63)</td>
<td>4.0 (100)</td>
<td></td>
</tr>
</tbody>
</table>

- Coverage sq ft/gal (m²/L):

<table>
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<tr>
<th>~Coverage sq ft/gal (m²/L)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>260 (6.4)</td>
<td>430 (10.5)</td>
<td></td>
</tr>
</tbody>
</table>

- Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft

1040 (25.5)

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 5.0 mils wet (125 microns):

<table>
<thead>
<tr>
<th>30°F-1.1°C</th>
<th>50°F/10°C</th>
<th>70°F/21°C</th>
<th>85°F/29°C</th>
<th>100°F/38°C</th>
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<td>100°F/38°C</td>
</tr>
</tbody>
</table>

50% RH

To recoat:

- minimum: 32 hrs 16 hrs 8 hrs 4 hrs 2 hrs
- Undocking*: 48 hrs 24 hrs 12 hrs 8 hrs 4 hrs

No maximum recoat time; however, any contamination must be removed by high pressure washing prior to applying the next coat.

*Undocking:

- Minimum: depends on the number of coats applied, film thickness, and temperature.
- Maximum: depends on the exposure conditions. Refer to Performance Tips section for details.

Shelf Life: 36 months, unopened
Store indoors at 40°F (4.5°C) to 100°F (38°C)

Flash Point: 72°F (22°C), SETA Flash
Reducer/Clean Up: VM&P Naphtha, R1K3

Recommended Uses

For use on prepared surfaces in marine environments

- As an antifoulant for underwater hull and boot top on vessels operating in global trade with short to medium idle times.
- Suitable for a wide range of operating environments and speeds

Performance Characteristics

- Resists fouling
- Contains 49% Cuprous Oxide

- Colors:
  - Red P30RQ10
  - Black P30BQ12
  - Blue P30LQ13

continued on back

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SEAGUARD® ABLATIVE ANTI FouLING COATING

P30RQ10 ................. RED
P30BQ12 ............. BLACK  P30LQ13 ................. BLUE

PRODUCT INFORMATION

Recommended Systems

| Steel:                                       | Dry Film Thickness / ct. Mils | Condition of Surface | Surface Preparation Standards | Tinting | Application Conditions | Ordering Information | Safety Precautions
<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 cts. SeaGuard 5000 HS</td>
<td>4.0 - 7.0 (100 - 175)</td>
<td></td>
<td></td>
<td>Do not tint.</td>
<td>Maximum application temperature is 120°F (49°C)</td>
<td>Packaging: 5 gallon (18.9L) containers</td>
<td>Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.</td>
</tr>
<tr>
<td>1-3 cts. SeaGuard Ablative Antifouling</td>
<td>2.5 - 4.0 (63 - 100)</td>
<td></td>
<td></td>
<td></td>
<td>Surface temperature must be at least 5°F (2.8°C) above the dew point</td>
<td>Weight: 18.5 ± lb/gal ; 2.22 Kg/L</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Number of coats is dependent on specification, existing hull conditions, and intended service life.

Steel:

| Steel:                                       | Dry Film Thickness / ct. Mils | Condition of Surface | Surface Preparation Standards | Tinting | Application Conditions | Ordering Information | Safety Precautions
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 cts. SeaGuard Underwater Hull HS Epoxy</td>
<td>5.0 - 7.0 (125 - 175)</td>
<td></td>
<td></td>
<td>Do not tint.</td>
<td>No surface ice, moisture, or condensation may be allowed on the surface during application</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 cts. SeaGuard Ablative Antifouling</td>
<td>2.5 - 4.0 (63 - 100)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Number of coats is dependent on specification and intended service life.

Steel, keel to bottom of boottop:

| Steel, keel to bottom of boottop:            | Dry Film Thickness / ct. Mils | Condition of Surface | Surface Preparation Standards | Tinting | Application Conditions | Ordering Information | Safety Precautions
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ct. SeaGuard Underwater Hull HS Epoxy, red</td>
<td>5.0 - 7.0 (125 - 175)</td>
<td></td>
<td></td>
<td>Do not tint.</td>
<td>Maximum application temperature is 120°F (49°C)</td>
<td>Packaging: 5 gallon (18.9L) containers</td>
<td>Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.</td>
</tr>
<tr>
<td>1 ct. SeaGuard Underwater Hull HS Epoxy, gray</td>
<td>5.0 - 7.0 (125 - 175)</td>
<td></td>
<td></td>
<td></td>
<td>Surface temperature must be at least 5°F (2.8°C) above the dew point</td>
<td>Weight: 18.5 ± lb/gal ; 2.22 Kg/L</td>
<td></td>
</tr>
<tr>
<td>1 ct. SeaGuard Ablative Antifouling, red</td>
<td>2.5 - 4.0 (63 - 100)</td>
<td></td>
<td></td>
<td></td>
<td>No surface ice, moisture, or condensation may be allowed on the surface during application</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. SeaGuard Ablative Antifouling, Lt Red</td>
<td>2.5 - 4.0 (63 - 100)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: Number of coats is dependent on specification and intended service life.

Previously Painted:

| Steel, keel to bottom of boottop:            | Dry Film Thickness / ct. Mils | Condition of Surface | Surface Preparation Standards | Tinting | Application Conditions | Ordering Information | Safety Precautions
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 cts. SeaGuard Ablative Antifouling</td>
<td>2.5 - 4.0 (63 - 100)</td>
<td></td>
<td></td>
<td>Do not tint.</td>
<td>Maximum application temperature is 120°F (49°C)</td>
<td>Packaging: 5 gallon (18.9L) containers</td>
<td>Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.</td>
</tr>
</tbody>
</table>

NOTE: Number of coats is dependent on specification, existing hull conditions, and intended service life.

The systems listed above are representative of the product’s use, other systems may be appropriate.

Surface Preparation

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Iron & Steel, bare: SSPC-SP10/NACE 2
Previously Painted: Clean, dry, sound

Surface Preparation Standards

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</th>
<th>BS7709: A1</th>
<th>Swedish Std.</th>
<th>SSPC</th>
<th>NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rusted</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>Si 1</td>
<td>SP 6</td>
<td>2</td>
</tr>
<tr>
<td>Rusted</td>
<td>D St 2</td>
<td>D St 2</td>
<td>D St 2</td>
<td>SP 2</td>
<td>-</td>
</tr>
</tbody>
</table>

Tinting

Do not tint.

Application Conditions

- Maximum application temperature is 120°F (49°C)
- Surface temperature must be at least 5°F (2.8°C) above the dew point
- No surface ice, moisture, or condensation may be allowed on the surface during application

Ordering Information

Packaging: 5 gallon (18.9L) containers
Weight: 18.5 ± lb/gal ; 2.22 Kg/L

Safety Precautions

Refer to the SDS sheet before use.

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Disclaimer

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Warranty

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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**Surface Preparations**

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

**Iron & Steel, bare**

Minimum surface preparation is Near White Blast Cleaning per SSPC-SP6/NACE 3. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Remove all weld spatter and round all sharp edges. Prime any bare steel within 8 hours or before flash rusting occurs, with the appropriate anticorrosive primer. See recommended systems or contact your Sherwin-Williams Marine Representative.

**Previously Painted Antifouling Surfaces**

Remove possible oil, grease, etc. with suitable detergent. Rinse using high pressure, fresh water cleaning, which will also remove any weak, outer layer of leached antifouling. Allow the surface to dry before overcoating. Whether or not to use a sealer coat over an existing antifouling depends on the type and condition of the existing antifouling.

**Surface Preparation Standards**

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1 Sa</th>
<th>BS7079-A1 Sa</th>
<th>Swedish Std. SS055900 Sa</th>
<th>SSPC SP5</th>
<th>NACE SP10</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

**Reduction/Clean Up**

- **VM&P Naphtha, R1K3**

**Application Equipment**

- **Airless Spray**
  - Pressure: ..............3600 psi
  - Hose: ..............3/8" ID
  - Tip: ..............0.023" - 0.027"
  - Filter: ..............100 mesh
  - Reduction: ..............as needed up to 5% by volume

- **Brush**
  - Brush: ..............Natural Bristle
  - Reduction: ..............as needed up to 5% by volume

- **Roller**
  - Cover: ..............3/8" woven with solvent resistant core
  - Reduction: ..............as needed up to 5% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.
**APPLICATION PROCEDURES**

Surface preparation must be completed as indicated.

**Mixing Instructions:** Mix paint thoroughly with low speed power agitation prior to use. Make sure there is no settling on the bottom of the can.

Apply paint at the recommended film thickness and spreading rate as indicated below:

<table>
<thead>
<tr>
<th>Recommended Spreading Rate per coat:</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet mils (microns)</td>
<td>4.0 (100)</td>
<td>7.0 (175)</td>
</tr>
<tr>
<td>Dry mils (microns)</td>
<td>2.5 (63)</td>
<td>4.0 (100)</td>
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<tr>
<td>~Coverage sq ft/gal (m²/L)</td>
<td>260 (6.4)</td>
<td>430 (10.5)</td>
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<tr>
<td>Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dtf</td>
<td>1040 (25.5)</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

**Cleaning Schedule @ 5.0 mils wet (125 microns):**

- **30°F-1.1°C 50°F/10°C 70°F/21°C 85°F/29°C 100°F/38°C 50% RH**

To recoat:
- Minimum: 32 hrs 16 hrs 8 hrs 4 hrs 2 hrs
- Undocking*:
  - Minimum: 48 hrs 24 hrs 12 hrs 8 hrs 4 hrs
  - No maximum recoat time; however, any contamination must be removed by high pressure washing prior to applying the next coat.

*Undocking:
- Minimum: depends on the number of coats applied, film thickness, and temperature.
- Maximum: depends on the exposure conditions. Refer to Performance Tips section for details.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

**CLEAN UP INSTRUCTIONS**

Clean spills and spatters immediately with VM&P Naphtha, R1K3. Clean tools immediately after use with VM&P Naphtha, R1K3. Follow manufacturer's safety recommendations when using any solvent.

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**APPLICATION BULLETIN**

**SEAGUARD® ABLATIVE ANTIFOULING COATING**

P30RQ10 .............. RED
P30BQ12 .............. BLACK
P30LQ13 .............. BLUE

**Performance Tips**

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinining, climatic conditions, and excessive film build.

Excess reduction of material is not recommended as it can affect film build, appearance, and adhesion.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with VM&P Naphtha, R1K3.

When applying over the recommended epoxy coat, the epoxy shall be tacky, but not hard. “Tacky” is defined as that curing (drying) stage when a fingertip pressed lightly against the film leaves only a slight impression and none of the film sticks to the finger.

By providing a constantly active surface during its lifetime, this antifouling is gradually sacrificed in the process. The color of the system changes in accordance with the colors of the coats applied, e. g.: Light red changes to whitish in direct contact with seawater.

**Indicated film thickness will vary according to specification. This will alter spreading rate and may influence drying time. In case of multi-coat application, drying time and minimum overcoating interval will be influenced by the number of coats and by the thickness of each coat applied.**

Overcoating: No maximum overcoating interval, but after prolonged exposure to polluted atmosphere, remove accumulated contamination by high pressure fresh water cleaning and allow to dry before applying next coat.

Undocking: Minimum undocking time depends on number of coats applied, film thickness, and the prevailing temperature.

Maximum undocking time depends on the exposure conditions, degree of air pollution, etc. The most important factor is to carry out a thorough high pressure fresh water cleaning after prolonged exposure. Outfitting periods to be evaluated from case to case. The recommended maximum undocking interval relates to vertical bottom only. Flat bottom, which has not been exposed to direct sunlight, will for all normal practical building schedules have a no-maximum value.

Refer to Product Information sheet for additional performance characteristics and properties.

**SAFETY PRECAUTIONS**

Refer to the SDS sheet before use.

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**WARRANTY**

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