PRODUCT DESCRIPTION

SEAGUARD® 1000 MARINE ENAMEL is a fast drying, patented modified alkyd rust inhibitive high gloss marine enamel. Seaguard 1000 Marine Enamel has excellent non-yellowing characteristics and superior color and gloss retention on exterior exposure. Specifically formulated to withstand Marine and coastal environments. For both interior and exterior applications.

- Corrosion resistant
- Excellent color and gloss retention
- Low odor

PRODUCT CHARACTERISTICS

Finish: High gloss
85+ Units @ 60° angle
Colors: Wide range of color availability
Volume Solids: 45% ± 2%, may vary by color
Weight Solids: 55% ± 2%, may vary by color
VOC (EPA Method 24): <420 g/L; 3.5 lb/gal, may vary by color

<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>6.0 (150)</td>
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<tr>
<td>Dry mils (microns)</td>
<td>2.0 (50)</td>
<td>3.0 (75)</td>
</tr>
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<td>~Coverage sq ft/gal (m²/L)</td>
<td>240 (5.9)</td>
<td>360 (8.8)</td>
</tr>
<tr>
<td>Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft</td>
<td>722 (17.7)</td>
<td></td>
</tr>
</tbody>
</table>

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

Drying Schedule @ 4.0 mils wet (100 microns):

- 1-2 hours
- 4-8 hours
- 12-24 hours
- 7 days

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life: 36 months, unopened at 77°F (25°C)
Flash Point: 110°F (43°C) PMCC
Reducer/Clean Up: Mineral Spirits, R1K4, clean up only

PRODUCT INFORMATION

RECOMMENDED USES

For atmospheric use on interior and exterior exposed marine surfaces such as commercial ocean craft, trim and decks, coastal structures and properly primed wood, Iron and Steel, Aluminum and Galvanizing.

- Deck Houses
- Handrails
- Machinery and Equipment
- Ladders
- Topside Areas
- Logo Equipment
- Freeboard

PERFORMANCE CHARACTERISTICS

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Test Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasion Resistance</td>
<td>ASTM D4060</td>
<td>54 grams</td>
</tr>
<tr>
<td>Direct Impact Resistance</td>
<td>ASTM G14</td>
<td>80 lbs</td>
</tr>
<tr>
<td>Dry Heat Resistance</td>
<td>ASTM D2485</td>
<td>300°F (149°C), paint film yellows but remains protective and intact</td>
</tr>
<tr>
<td>Exterior Durability</td>
<td></td>
<td>Excellent</td>
</tr>
<tr>
<td>Flexibility</td>
<td>ASTM D522</td>
<td>1/8&quot; bend</td>
</tr>
<tr>
<td>Pencil Hardness</td>
<td>ASTM D3363</td>
<td>2 - 4 H</td>
</tr>
<tr>
<td>Reverse Impact Resistance</td>
<td>ASTM G14</td>
<td>10 lbs</td>
</tr>
<tr>
<td>Salt Fog Resistance</td>
<td>ASTM B117, 500 hours</td>
<td>Passes</td>
</tr>
<tr>
<td>Wet Heat Resistance (non-immersion)</td>
<td></td>
<td>100°F (38°C)</td>
</tr>
</tbody>
</table>

Meets the requirements of:
CAN/CGSB 1.61 For Canada DND
PROTECTIVE & MARINE COATINGS

SEAGUARD® 1000
MARINE ENAMEL

N41-620 SERIES

PRODUCT INFORMATION

RECOMMENDED SYSTEMS

<table>
<thead>
<tr>
<th>Surface Type</th>
<th>Dry Film Thickness / ct.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mils</td>
</tr>
<tr>
<td>Steel, alkyd primer:</td>
<td></td>
</tr>
<tr>
<td>1 ct. Seaguard Universal Primer</td>
<td>2.5-3.5</td>
</tr>
<tr>
<td>2 cts. Seaguard 1000 Marine Enamel</td>
<td>2.0-3.0</td>
</tr>
<tr>
<td>Aluminum:</td>
<td></td>
</tr>
<tr>
<td>1 ct. DTM Wash Primer</td>
<td>0.7-1.3</td>
</tr>
<tr>
<td>2 cts. Seaguard 1000 Marine Enamel</td>
<td>2.0-3.0</td>
</tr>
<tr>
<td>Galvanized Metal:</td>
<td></td>
</tr>
<tr>
<td>1 ct. Galvite HS</td>
<td>3.0-4.5</td>
</tr>
<tr>
<td>2 cts. Seaguard 1000 Marine Enamel</td>
<td>2.0-3.0</td>
</tr>
</tbody>
</table>

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: SSPC-SP2
- *Aluminum: SSPC-SP1
- *Galvanizing: SSPC-SP1
- Wood: Clean, smooth, dust free

TINTING

Use Maxitoner Colorants only at 100% strength.

APPLICATION CONDITIONS

Temperature: 40°F (4.5°C) minimum, 120°F (49°C) maximum (air, surface, and material)
At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 1 gallon (3.78L) and 5 gallon (18.9L) containers

Weight: 8.97 ± 0.2 lb/gal ; 1.1 Kg/L, may vary with color

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

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.

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

DISCLAIMER

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www.sherwin-williams.com/protective
**APPLICATION BULLETIN**

**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**

Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface using Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel within 8 hours or before flash rusting occurs.

**Aluminum**

Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. Primer required.

**Galvanized Steel**

Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1 (recommended solvent is VM&P Naphtha). When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned. Primer required.

**Wood**

Surface must be clean, dry, and sound. Paint as soon as possible. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed. All nail holes or small openings must be properly caulked. Sand to remove any loose or deteriorated surface wood and to obtain a proper surface profile. Self priming.

**Previously Painted Surfaces**

If in sound condition, clean the surface of all foreign material. Use a tri-sodium phosphate solution to remove oil, grease, and wax from surfaces. Rinse with clear water and allow surfaces to dry. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

**APPLICATION CONDITIONS**

Temperature: 40°F (4.5°C) minimum, 120°F (49°C) maximum

Relative humidity: 85% maximum

**APPLICATION EQUIPMENT**

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.

**Reducer**

Mineral Spirits, R1K4, clean up only

**Airless Spray**

Pressure: 2500 psi

Hose: 3/8” ID

Tip: 015”

Filter: 100 mesh

Reduction: not recommended

**Conventional Spray**

Gun: Binks 95

Fluid Nozzle: 66

Air Nozzle: 63PB

Atomization Pressure: 50 psi

Fluid Pressure: 20-25 psi

Reduction: not recommended

**Brush**

Brush: Natural Bristle

Reduction: not recommended

**Roller**

Cover: 3/8” woven with solvent resistant core

Reduction: not recommended

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

**Surface Preparation Standards**

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1 BS 7079:1 A1</th>
<th>Swedish Std.</th>
<th>SSPC NACE</th>
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</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>SP 5</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2.5</td>
<td>Sa 2</td>
<td>SP 10</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>Sa 2</td>
<td>SP 6</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>Sa 1</td>
<td>SP 7</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Rusted</td>
<td>C St 2</td>
<td>SP 2</td>
</tr>
<tr>
<td>Pitted &amp; Rusted</td>
<td>D St 2</td>
<td>C St 2</td>
<td>SP 2</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted</td>
<td>C St 3</td>
<td>SP 3</td>
</tr>
</tbody>
</table>
APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly with low speed power agitation prior to use.

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

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

Drying Schedule @ 4.0 mils wet (100 microns):

- @ 77°F/25°C
- 50% RH
- To touch: 1-2 hours
- To handle: 4-8 hours
- To recoat: 12-24 hours
- To cure: 7 days

Drying time is temperature, humidity, and film thickness dependent.

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

PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

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, overthinng, climatic conditions, and excessive film build.

No reduction of material is 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 Mineral Spirits, R1K4.

Deep tinted colors may exhibit burnishing characteristics.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Mineral Spirits, R1K4.
Clean tools immediately after use with Mineral Spirits, R1K4.
Follow manufacturer’s safety recommendations when using any solvent.

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