PRODUCT DESCRIPTION

SEAGUARD 6000 MARINE EPOXY is a modified epoxy phen-alkamine, formulated specifically for immersion and atmospheric service in marine and industrial environments. SeaGuard 6000 is a versatile anti-corrosive coating that can be applied at temperatures as low as 20°F/-7°C.

• Self-priming
• Low temperature application
• Surface tolerant - damp surfaces
• Provides salt water and fresh water immersion resistance

PRODUCT CHARACTERISTICS

Finish: Low Sheen
Colors: Red Oxide, Gray, Off-White, Black, Buff, Aluminum, Bronze Tone
Volume Solids: 67% ± 2%, mixed
Weight Solids: 80% ± 2%, mixed
VOC (EPA Method 24):
  Unreduced: <300 g/L; 2.50 lb/gal
  Reduced 10%: <340 g/L; 2.80 lb/gal
Mix Ratio: 4:1 by volume (2 component)

Recommended Spreading Rate per coat:

<table>
<thead>
<tr>
<th>Wet mils (microns)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.0 (200)</td>
<td>11.0 (275)</td>
<td></td>
</tr>
</tbody>
</table>

Dry mils (microns): 5.0 (125) / 7.0 (175)

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

1072 (26.2)

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

Drying Schedule @ 8.0 mils wet (200 microns):

- To touch: 3.5 hours
- To handle: 12 hours
- To recoat:
  - minimum: 12 hours
  - maximum: 30 days
- Cure to service: 14 days

If maximum recoat time is exceeded, abrade surface before recoating.

Direct Impact Resistance:

ASTM D2794
32 in. lb.

Flexibility:

ASTM D522, 180° bend, 1" mandrel
Passes

Immersion Resistance:

ASTM D5894, 15 cycles, 5,000 hours
Rating 10 per ASTM D714 for blistering; Rating 10 per ASTM D610 per rusting

Moisture Resistance:

ASTM D4585, 5000 hours, 100°F
Rating 10 per ASTM D714 for blistering; Rating 10 per ASTM D610 per rusting

Pencil Hardness:

ASTM D3363
5H

IMMERSION (Ambient temperature):

• Salt Water............................................ Recommended
• Fresh Water............................................ Recommended
• Ballast Tank Mix .............................................. Recommended

Epoxy coatings may darken or yellow following application and curing.

Recommended Uses:

For use over properly prepared steel substrates, including:

• Salt water and fresh water immersion service
• Ballast tanks
• Offshore and marine structures
• Bilges and wet void areas
• Decks and superstructures
• Underwater hulls
• Fabrication and new construction
• Maintenance and repair
• As an anti-corrosive primer when used as part of an underwater hull system with anti-fouling coatings
• Immersion service in wastewater treatment plants

Performance Characteristics

Substrate*: Steel
Surface Preparation*: SSPC-SP10/NACE 2
System Tested*:

2 cts. SeaGuard 6000 Marine Epoxy @ 6.5 mils (162 microns) dft/ct

*unless otherwise noted below

Test Name | Test Method | Results
--- | --- | ---
Corrosion | ASTM D5894, 15 cycles, 5,000 hours | Rating 10 per ASTM D714 for blistering; Rating 10 per ASTM D610 per rusting
Weathering | | |
Direct Impact | ASTM D2794 | 32 in. lb.
Resistance | |
Flexibility | ASTM D522, 180° bend, 1" mandrel | Passes
Immersion | 1 year fresh and salt water | Passes, no rusting, blistering, or loss of adhesion
Moisture | ASTM D4585, 5000 hours, 100°F | Rating 10 per ASTM D714 for blistering; Rating 10 per ASTM D610 per rusting
Resistance | |
Pencil Hardness | ASTM D3363 | 5H

Epoxy coatings may darken or yellow following application and curing.

Received Highest Obtainable rating B1.
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.

Minimum recommended surface preparation:

**Iron & Steel:**
- Atmospheric: SSPC-SP2 or SSPC-SP12/NACE No. 5, WJ-3/SC-2
- Immersion: SSPC-SP10/NACE 2, 2.0 mil (50 micron) profile or SSPC-SP12/NACE No. 5, WJ-2/SC-2

**Galvanized, atmospheric:** SSPC-SP1

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</th>
<th>Swedish Std.</th>
<th>SSPC</th>
<th>NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>SP 5</td>
<td>1</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2.5</td>
<td>Sa 2.5</td>
<td>SP 10</td>
<td>2</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>Sa 2</td>
<td>SP 6</td>
<td>3</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>Sa 1</td>
<td>SP 7</td>
<td>4</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>C St 2</td>
<td>C St 2</td>
<td>SP 2</td>
<td>-</td>
</tr>
<tr>
<td>Rusted</td>
<td>C St 2</td>
<td>C St 2</td>
<td>SP 2</td>
<td>-</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>D St 3</td>
<td>D St 3</td>
<td>SP 3</td>
<td>-</td>
</tr>
<tr>
<td>Rusted</td>
<td>D St 3</td>
<td>D St 3</td>
<td>SP 3</td>
<td>-</td>
</tr>
</tbody>
</table>

Do not tint.

**Application Conditions**

Temperature: 20°F (-7°C) minimum, 120°F (49°C) maximum (air and surface)
At least 5°F (2.8°C) above dew point
Material should be at least 60°F (16°C) for optimal performance.
Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

**Ordering Information**

1 gallon (3.78L) mix:
- Part A - 0.797 gal. (3.0L) in a 1 gal. (3.78L) container
- Part B - 0.203 gal. (0.77L) in a quart (0.94L) container

5 gallon (18.9L) mix:
- Part A - 4 gal. (15.1L) in a 5 gal. (18.9L) container
- Part B - 1 gallon (3.78L)

Weight: 11.87 ± 0.2 lb/gal; 1.4 Kg/L, mixed, 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.

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.
Surface Preparation Standards

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1 BS7079:A1</th>
<th>Swedish Std SIS055900</th>
<th>SSPC</th>
<th>NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>3</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2.5</td>
<td>Sa 2.5</td>
<td>Sa 2</td>
<td>5</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>Sa 2</td>
<td>Sa 2</td>
<td>2</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>Sa 1</td>
<td>Sa 1</td>
<td>1</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Pitted &amp; Rusted</td>
<td>D St 2</td>
<td>D St 2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Rusted</td>
<td>C St 2</td>
<td>C St 2</td>
<td>2</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Pitted &amp; Rusted</td>
<td>D St 3</td>
<td>D St 3</td>
<td>3</td>
</tr>
</tbody>
</table>

**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, Immersion Service:**
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2 or SSPC-SP12/NACE No. 5. For SSPC-SP10/NACE 2, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2.0 mils/50 microns). For SSPC-SP12/NACE No. 5, all surfaces to be coated shall be cleaned in accordance with WJ-2/SC-2 standards. Pre-existing profile should be approximately 2.0 mils (50 microns). Light rust bloom is allowed. Remove all weld spatter and round all sharp edges. Prime any bare steel the same day as it is cleaned.

**Iron & Steel, Atmospheric Service:**
Minimum surface preparation is Hand Tool Clean per SSPC-SP2 or SSPC-SP12/NACE No. 5. For surfaces prepared by SSPC-SP2, first remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6/NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2.0 mils/50 microns). For surfaces prepared by SSPC-SP12/NACE No. 5, all surfaces shall be cleaned in accordance with WJ-3/SC-2. Pre-existing profile should be approximately 2.0 mils (50 microns). Prime any bare steel the same day as it is cleaned.

**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.

**Application Conditions**

Temperature: 20°F (-7°C) minimum, 120°F (49°C) maximum (air and surface) At least 5°F (2.8°C) above dew point

Material should be at least 60°F (16°C) for optimal performance.

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/Clean Up**

Above 50°F (10°C)........R7K104
Below 50°F (10°C).........R6K30

**Airless Spray**

Unit:.........................30:1 Pump
Pressure.....................2400 - 2800 psi
Hose..........................1/4" - 3/8" ID
Tip............................017" - .021"
Filter........................60 mesh
Reduction....................As needed, up to 10% by volume

**Conventional Spray**

Gun.........................DeVilbiss MBC-510
Fluid Tip....................E
Air Nozzle.................704
Atomization Pressure......60-65 psi
Fluid Pressure..............5-15 psi
Reduction....................As needed, up to 10% by volume

**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.

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**SEAGUARD® 6000**

**MARINE EPOXY**

<table>
<thead>
<tr>
<th>PART A</th>
<th>N11-400</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART B</td>
<td>N11V400</td>
</tr>
</tbody>
</table>

**APPLICATION BULLETIN**

**APPLICATION PROCEDURES**

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly using low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine 4 parts by volume of Part A with 1 part by volume of Part B. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated prior to application. Re-stir before using.

If reducer solvent is used, add only after both components have been thoroughly mixed, after sweat-in.

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

<table>
<thead>
<tr>
<th>Recommended Spreading Rate per coat:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum</strong></td>
</tr>
<tr>
<td>Wet mils (microns)</td>
</tr>
<tr>
<td>Dry mils (microns)</td>
</tr>
<tr>
<td>Coverage sq ft/gal (m²/L)</td>
</tr>
<tr>
<td>Theoretical coverage sq ft/gal (m³/L)</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
</tr>
<tr>
<td>Wet mils (microns)</td>
</tr>
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<tr>
<td>Theoretical coverage sq ft/gal (m³/L)</td>
</tr>
</tbody>
</table>

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

**Drying Schedule @ 8.0 mils wet (200 microns):**

<table>
<thead>
<tr>
<th></th>
<th>@ 45°F/41°C</th>
<th>@ 77°F/25°C</th>
<th>@ 120°F/49°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>To touch:</td>
<td>3.5 hours</td>
<td>2 hours</td>
<td>20 minutes</td>
</tr>
<tr>
<td>To handle:</td>
<td>12 hours</td>
<td>3.5 hours</td>
<td>40 minutes</td>
</tr>
<tr>
<td>To recoat:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>minimum:</td>
<td>12 hours</td>
<td>3.5 hours</td>
<td>40 minutes</td>
</tr>
<tr>
<td>maximum:</td>
<td>30 days</td>
<td>30 days</td>
<td>30 days</td>
</tr>
<tr>
<td>Cure to service:</td>
<td>14 days</td>
<td>7 days</td>
<td>3 days</td>
</tr>
</tbody>
</table>

*If maximum recoat time is exceeded, abrade surface before recoating.*

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

**Pot Life:** 8 hours 4 hours 1 hour

**Sweat-in-Time:** 30 minutes 15 minutes 5 minutes

Application of the antifouling coating shall occur while the epoxy anticorrosive is still tacky. “Tacky” is defined as that curing (drying) stage when a fingertip pressed lightly against the film leaves a slight impression and none of the film sticks to the finger.

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 Reducer R7K104 or R6K30. Clean tools immediately after use with Reducer R7K104 or R6K30. Follow manufacturer's safety recommendations when using any solvent.

**DISCLAIMER**

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.

**SAFETY PRECAUTIONS**

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**WARRANTY**

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