HI-SOLIDS CATALYZED EPOXY

PRODUCT INFORMATION

PRODUCT DESCRIPTION

HI-SOLIDS CATALYZED EPOXY is a polyamide/bisphenol A epoxy resin coating formulated for immersion service in fresh and salt water. May also be used as part of a system for tank exteriors.

- Chemical resistant
- Corrosion resistant
- Direct to metal application
- Outstanding application properties

PRODUCT CHARACTERISTICS

Finish: Low sheen
Color: Sanitary White, Beige, Light Blue (SW4061)
Volume Solids: 61% ± 2%, mixed
Weight Solids: 77% ± 2%, mixed
VOC (EPA Method 24): Unreduced: <340 g/l; 2.8 lb/gal
- Reduced 10%: <400 g/L; 3.33 lb/gal
Mix Ratio: 4:1 by volume

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>10.0 (250)</td>
<td></td>
</tr>
</tbody>
</table>

Dry mils (microns) 5.0 (125) 6.0 (150)

Coverage sq ft/gal (m²/L):

- Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft: 976 (23.9)

Exterior Durability:
1 year at 45° South: Excellent, chalks

Pot Life: 10 hours
Sweat-in-time: 1 hour

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

Flash Point: 80°F (27°C), PMCC, mixed
Reducer/Clean Up: Xylene, R2K4

PRODUCT INFORMATION

RECOMMENDED USES

According to FDA Regulation 175.300, this product (Sanitary White) is suitable for use on surfaces intended for use in the production, manufacturing, packing, processing, treating, transporting or storage of dry food at ambient temperatures when applied as a continuous film.

According to FDA Regulation 175.300, this product (Sanitary White) has been tested and complies with standards for wet food storage (as a coating intended for use in containers for repeated use, not to exceed 18 mg/sq in extractables). We have compliance with condition of use “A”. The types of foods approved are: I. Non-acid (pH above 5.0), aqueous products; may contain salt or vinegar or both and including oil-in-water emulsions of low- or high-fat content; and IV.B. Dairy products and modifications: oil-in-water emulsion, high- or low-fat.

- Not for use in potable water storage tanks
- Suitable for use in USDA inspected facilities
- Acceptable for use with cathodic protection systems

PERFORMANCE CHARACTERISTICS

Substrate*: Steel
Surface Preparation*: SSPC-SP10/NACE 2
System Tested*:
2 cts. Hi-Solids Catalyzed @ 5.0 mils (125 microns) dft/ct

Test Name | Test Method | Results
--- | --- | ---
Abrasion Resistance | ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load | 120 mg loss
Adhesion | ASTM D4541 | 1169 psi
Direct Impact Resistance | ASTM D2794 | 60 in. lbs.
Dry Heat Resistance | ASTM D2485 | 200°F (93°C) (discolors)
Exterior Durability | 1 year at 45° South | Excellent, chalks
Flexibility | ASTM D522, 180° bend, 1" mandrel | Passes
Freshwater Immersion | ASTM D870, 4 years | No blistering, cracking, or rusting
Moisture Condensation Resistance | ASTM D4585, 100°F (38°C), 2000 hours | No failure, no blistering, creepage, or underfilm corrosion
Pencil Hardness | ASTM D3363 | 4H
Salt Fog Resistance | ASTM B117, 3000 hours | No blistering, creepage, or underfilm corrosion

Epoxy coatings may darken or yellow following application and curing.

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**Product Information**

### Recommended Systems

<table>
<thead>
<tr>
<th>Surface Prepar.</th>
<th>Dry Film Thickness / ct. Mils (Microns)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immersion Service</strong> (Note: Do Not Tint)</td>
<td></td>
</tr>
<tr>
<td>Steel:</td>
<td>2-3 cts. Hi-Solids Catalyzed Epoxy</td>
</tr>
<tr>
<td></td>
<td>1 ct. Steel Seam FT910 as required to seal seams and radius joints</td>
</tr>
<tr>
<td></td>
<td>2 cts. Hi-Solids Catalyzed Epoxy</td>
</tr>
<tr>
<td><strong>Steel, shop applied system:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 ct. Hi-Solids Catalyzed Epoxy</td>
</tr>
<tr>
<td></td>
<td>2 cts. Hi-Solids Catalyzed Epoxy</td>
</tr>
<tr>
<td><strong>Concrete:</strong></td>
<td>2-2 cts. Kem Cat-Coat HS Epoxy Filler/Sealer</td>
</tr>
<tr>
<td></td>
<td>2 cts. Hi-Solids Catalyzed Epoxy</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**

- **Atmospheric:** SSPC-SP6/NACE 3 2.0 mil (50 micron) profile
- **Immersion:** SSPC-SP10/NACE 2, 2.0-3.0 mil (50-75 micron) profile

**Concrete & Masonry**

- **Atmospheric:** SSPC-SP 13/Nace 6, or ICRI No. 310.2, CSP 2-3
- **Immersion:** SSPC-SP 13/Nace 6-4.3.1 or 4.3.2 or ICRI No. 310.2, CSP 2-3

### Surface Preparation Standards

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</th>
<th>BS7079-A1</th>
<th>Swedish Std.</th>
<th>SSPC NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>SP 5</td>
<td>3</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 3</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>Power Tool Cleaning</td>
<td>C St 3</td>
<td>C St 3</td>
<td>SP 3</td>
<td>-</td>
</tr>
</tbody>
</table>

### Tinting

Tint with Blend-A-Color Toner at 75% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color. Tint Part B side, 1 oz. per gallon maximum.

Do not tint for Immersion Service.

### Application Conditions

Temperature: 55°F (13°C) minimum, 120°F (49°C) maximum

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

### Ordering Information

Packaging: 5 gallons (18.9L) mixed
Part A: 4 gallons (15.1L) in a 5 gallon (18.9L) container
Part B: 1 gallon (3.78L)

Weight: 12.30 ± 0.2 lb/gal ; 1.48 Kg/L, mixed

### 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.

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HI-SOLIDS
CATALYZED EPOXY

PART A B62W201
PART A B62H200
PART A B62L200
PART B B60V20

Sanitary White
Beige
Light Blue
Hardener

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 (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. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2-3 mils/50-75 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Iron & Steel (atmospheric service)
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils/50 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP 2-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2 Concrete Surface Preparation.

Concrete, Immersion Service:
For surface preparation, refer to SSPC-SP13/NACE 6, Section 4.3.1 or 1.3.2 or ICRI No. 310.2, CSP 2-3.

Application Conditions

Temperature: 55°F (13°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

Application Equipment

Reducer/Clean Up Xylene, R2K4
Use of any other solvent than Xylene, R2K4 may affect the performance or compliance of this product for its intended service.

Airless Spray
Pressure 3000 psi minimum
Hose 1/4" - 3/8" ID
Tip .017" - .021"
Filter 30 mesh
Reduction As needed up to 10% by volume

Conventional Spray
Gun Binks 95
Cap/Tip 68 PB/68
Atomization Pressure 80 psi
Fluid Pressure 30 psi
Reduction As needed up to 10% by volume

Brush
Brush Small areas only, Natural Bristle
Reduction Not recommended

Roller
Cover Small areas only, 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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**APPLICATION PROCEDURES**

Surface preparation must be completed as indicated. Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine four parts by volume of Part A with one part by volume of Part B. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated below 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>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet mils (microns)</td>
<td>8.0 (200)</td>
<td>10.0 (250)</td>
</tr>
<tr>
<td>Dry mils (microns)</td>
<td>5.0 (125)</td>
<td>6.0 (150)</td>
</tr>
<tr>
<td>Coverage sq ft/gal (m²/L)</td>
<td>165 (4.0)</td>
<td>195 (4.8)</td>
</tr>
<tr>
<td>Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft</td>
<td>976 (23.9)</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 @ 8.0 mils wet (200 microns):**

<table>
<thead>
<tr>
<th></th>
<th>@ 55°F/13°C</th>
<th>@ 77°F/25°C</th>
<th>@ 120°F/49°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>To touch</td>
<td>4 hours</td>
<td>1 hour</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Tack free</td>
<td>8 hours</td>
<td>4 hours</td>
<td>2 hours</td>
</tr>
<tr>
<td>To recoat:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>minimum:</td>
<td>24 hours</td>
<td>12 hours</td>
<td>4 hours</td>
</tr>
<tr>
<td>maximum:</td>
<td>60 days</td>
<td>60 days</td>
<td>60 days</td>
</tr>
<tr>
<td>To cure:</td>
<td>14 days</td>
<td>7 days</td>
<td>3 days</td>
</tr>
<tr>
<td></td>
<td>Force cure requirement is 3 days, consisting of 24 hours ambient, 24 hours at 100°F (38°C), and 24 hours ambient. If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent. <strong>Pot Life:</strong></td>
<td>10 hours</td>
<td>5 hours</td>
</tr>
<tr>
<td></td>
<td><strong>Sweat-in-time:</strong></td>
<td>1 hour</td>
<td>30 minutes</td>
</tr>
</tbody>
</table>

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 Xylene, R2K4. Clean tools immediately after use with Xylene, R2K4. Follow manufacturer’s safety recommendations when using any solvent.

**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, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Insufficient ventilation, incomplete mixing, miscatalyzation, and external heaters may cause premature yellowing.

Excessive film build, poor ventilation, and cool temperatures may cause solvent entrapment and premature coating failure.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Xylene, R2K4.

For Immersion Service: (if required) Holiday test in accordance with ASTM D5162 for steel, or ASTM D4787 for concrete.

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

**SAFETY PRECAUTIONS**

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**WARRANTY**

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