COROBOND™ HS  
HIGH SOLIDS EPOXY PRIMER

**PRODUCT INFORMATION**

**PRODUCT DESCRIPTION**

COROBOND HS HIGH SOLIDS EPOXY PRIMER is a two-component, high solids epoxy primer. It is designed to provide an amine blush resistant surface under cool, high humidity conditions.

- Low temperature cure down to 45°F (7°C)
- Cures blush-free in 80% relative humidity
- Excellent wetting and penetration of porous surfaces
- Excellent adhesion to oil contaminated concrete after proper surface cleaning and preparation

**PRODUCT CHARACTERISTICS**

- **Finish:** Gloss
- **Color:** Clear
- **Volume Solids:** 72%
- **VOC (calculated):** <340 g/L; 2.8 lbs/gal
- **Mix Ratio:** 1:1

<table>
<thead>
<tr>
<th>Recommended Spreading Rate per coat:</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
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<tr>
<td>Wet mils (microns)</td>
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<td>Theoretical coverage sq ft/gal (m²/L)</td>
<td>1152 (28.2)</td>
<td></td>
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</table>

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

- @ 73°F/23°C
- 50% RH
- To touch: 3.5 hours
- *To recoat:*
  - minimum: 8-12 hours
  - maximum: 24 hours
- To cure: 7 days

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

**Performance characteristics**

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Test Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesion (Concrete)</td>
<td>ACI 503R</td>
<td>350 psi, 100% concrete failure</td>
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**Recommended Uses**

Corobond HS is used in immersion or atmospheric exposure as a primer for epoxy and polyurea coating and lining systems over concrete and masonry.

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**Performance Characteristics**

- **Shelf Life:** 18 months, unopened
  - Store indoors at 40°F (4.5°C) to 100°F (38°C).
- **Viscosity:** 1500 cps
- **Reducer:** Not recommended
- **Clean Up:** Xylene, R2K4
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:
Concrete & Masonry:
- Atmospheric: SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 3-6*
- Immersion: SSPC-SP13/NACE 6-4.3.1 or 4.3.2, or ICRI No. 310.2R, CSP 3-6*

*Refer to System Selection Guide

Surface Preparation Standards

<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 2.5</td>
<td>Sa 3</td>
<td>SP 5</td>
<td>1</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2</td>
<td>Sa 2.5</td>
<td>SP 6</td>
<td>3</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>Sa 1</td>
<td>SP 7</td>
<td>4</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>Sa 1</td>
<td>SP 8</td>
<td>-</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Rusted</td>
<td>Cs St 2</td>
<td>SP 9</td>
<td>-</td>
</tr>
<tr>
<td>Rusted</td>
<td>D St 2</td>
<td>D St 2</td>
<td>SP 10</td>
<td>-</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted</td>
<td>Cs St 2</td>
<td>SP 10</td>
<td>-</td>
</tr>
<tr>
<td>Pitted &amp; Rustled</td>
<td>D St 3</td>
<td>D St 3</td>
<td>SP 10</td>
<td>-</td>
</tr>
</tbody>
</table>

Tinting

Do not tint.

Application Conditions

Temperature:
- 45°F (7°C) minimum, 90°F (32°C) maximum (air, surface, 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:
- Part A: 1 gallon (3.78L) and 5 gallon (18.9L)
- Part B: 1 gallon (3.78L) and 5 gallon (18.9L)

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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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.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 3-6*. 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. 310.2R 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. 310.2R, CSP 3-6*.

*Refer to System Selection Guide

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Application Bulletin

Temperature: 45°F (7°C) minimum, 90°F (32°C) maximum (air, surface, material) At least 5°F (2.8°C) above dew point
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.

Reduction: Not recommended
Cleanup: Xylene, R2K4
Airless Spray:
Pump Ratio: Graco King 45:1
Gun: Graco Silver Plus
Fluid Hose: 3/8" - 1/2" I.D.
Tip Orifice: .015" - .017"
Fan Width at 12": 12.0"
Fluid Pressure: 3600 - 4000 psi
Filter Screen: .60 mesh

Brush:
Brush: Natural bristle for coating touch-up, repair, and application in small areas

Roller:
Cover: 3/8" nap with solvent resistant core

Squeegee:
Flat squeegee: For horizontal applications followed by back roll with roller

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

Surface preparation must be completed as indicated.

For detailed installation instructions, refer to the Installation Procedures for the respective system type in the ControlTech Technical Resource Manual.

**Mixing Instructions:** Premix individual components separately, using a low-speed drill and Jiffy Blade model ES mixer. Combine one part by volume of Part B to one part by volume of Part A. Mix with low speed drill and Jiffy Blade model ES mixer for three minutes and until uniform.

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

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

- **To touch:** 3.5 hours
- **To recoat:**
  - minimum: 8-12 hours
  - maximum: 24 hours
- **To cure:** 7 days

*Maximum recoat interval may be shorter when using Polyurea coating, self-leveling or mortar laminate. If planning to install subsequent coating, self-leveling, or mortar laminate after the primer has fully cured, lightly sprinkle 40-60 mesh silica sand into the primer prior to its curing. Adhere to recoat drying schedule indicated in the Application Procedures.

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.

**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.

**Performance Tips**

For concrete, always perform Calcium Chloride test as per ASTM F1869. Do not proceed with MVE >3 lbs.

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.

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. In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with MEK, R6K10.

Store in a temperature controlled environment, 50°F (10°C) to 80°F (26°C), and out of direct sunlight. Keep resins, catalysts, and solvents separated from each other and away from sources of ignition.

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

Allow primer to become tacky prior to application of subsequent coating, self-leveling or mortar laminate. If planning to install subsequent coating, self-leveling, or mortar laminate after the primer has fully cured, lightly sprinkle 40-60 mesh silica sand into the primer prior to its curing. Adhere to recoat drying schedule indicated in the Application Procedures.

When topcoating with Envirolastic polyureas, do not fill the profile with ASTM D1869. Do not proceed with MVE >3 lbs.

“Tack free” is defined as slight to medium pressure with a gloved hand, placed on a primed surface, that when lifted shows a slight imprint or distortion to the surface, with no transfer of primer to the glove.

Consult your Sherwin-Williams representative for specific application and performance recommendations.

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

**Safety Precautions**

Refer to the MSDS sheet before use.

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