ARMORSEAL® 8100
WATER BASED EPOXY FLOOR COATING

Product Description

ARMORSEAL 8100 is the next generation in water based epoxy floor coatings; a two-component polyamine epoxy with excellent chemical and abrasion resistance that is breathable. It is designed for use in commercial, industrial and residential floor applications. A LEED 4.2 compliant material that offers improved performance while maintaining ease of application properties common to water based materials. This versatile material is self-priming over concrete, can be used as a stand alone coating or as a receiver coat for paint chip floors. Available in a gloss or satin finish
• Breathable
• <50 g/L
• Color Retention, resists yellowing
• Resists disbondment due to Moisture Vapor Transmission (MVT)
• Ease of application

Product Characteristics

Finish: Gloss or Satin
Color: Clear*, Tile Red, Deck Gray, Haze Gray and a wide range of tinted colors using CCE colorants
Safety Colors: Gloss only
* For Clear, use the Ultra Deep Base (for more detail, see Application Bulletin Performance Tips)
Volume Solids: 41% ± 2%, mixed, may vary by color
Weight Solids: 50% ± 2%, mixed, may vary by color
VOC (EPA Method 24): <50 g/L; 0.42 lb/gal, mixed
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>5.0 (125)</td>
<td>12.0 (300)</td>
<td></td>
</tr>
<tr>
<td>Dry mils (microns)</td>
<td>2.0 (50)</td>
<td>5.0 (125)</td>
</tr>
<tr>
<td>~Coverage sq ft/gal (m²/L)</td>
<td>130 (3.3)</td>
<td>320 (8.1)</td>
</tr>
</tbody>
</table>

NOTE: Brush or roll to cover base or vertical surfaces may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 7.0 mils wet (175 microns):

| To touch | 1 hour | 45 minutes | 25 minutes |
| To recoat* | minimum: 8 hours | 6 hours | 3 hours |
| maximum: 72 hours | 72 hours | 72 hours |
| To Cure | 7 days | 7 days | 7 days |
| Foot Traffic | 18 hours |
| Heavy Traffic | 48 hours |

Drying time is temperature, humidity, and film thickness dependent.
*If recoating after 72 hours abrade surface first.

Test Name | Test Method | Results
---|---|---
Abrasion Resistance | ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load | 150 mg loss
Adhesion | ASTM D4541 | 550 psi concrete
Finish | Satin | 15-25 units @ 85º
Gloss | 90+ units @ 60º
Flexibility | ASTM D 522 | 180º bend
Impact Resistance | ASTM D2794 | Direct 100 in.lb.
Indirect 80 in.lb.
Pencil Hardness | ASTM D3363 | H
Slip Resistance, Floors | ASTM C1028**, .60 Minimum Static Coefficient of Friction | Passes wet and dry, with and without SharkGrip Additive
WVP Perms (US) | Grains/hr ft² in Hg | Gloss – 2.0
Satin – 5.0
Hot Tire Pick-up | ITM @ 140°F (60°C) | Passes

**Test method withdrawn in 2014 without replacement

Recommended Uses

Durable epoxy floor coating for general purpose use in industrial and commercial environments, such as:
• Warehouse Floors
• Garages
• Residential
• Automotive Showrooms
• Industrial and Commercial Floors
• Light manufacturing Plants
• Acceptable for use in USDA inspected facilities

Performance Characteristics

Substrate: Concrete
Surface Preparation: Clean, dry, sound
System Tested:
2 cts. ArmorSeal 8100 @ 2.0 - 4.0 mils (50-100 microns) dft

Shelf Life: Part A: 24months, unopened
Part B: 36 months
Store indoors at 40°F (4.5°C) to 100°F (38°C)
Flash Point: >230°F (110°C), Seta Flash, mixed
Reducer/Clean Up: Water

www.sherwin-williams.com/protective
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.

Do not use hydrocarbon solvents for cleaning.

Minimum recommended surface preparation:
Concrete & Masonry: SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP1-3

Tinting

Tint part A with CCE colorants at 100% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

Application Conditions

Temperature: 50°F (10°C) minimum, 100°F (38°C) maximum
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: 9.9 ± 0.2 lb/gal ; 1.12 Kg/L mixed, may vary by 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.
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.

**Do not use hydrocarbon solvents for cleaning.**

**Concrete and Masonry**

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3. 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. 310.2R Concrete Surface Preparation.

**Previously Painted Surfaces**

If in sound condition, clean the surface of all foreign material. 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.

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**Surface Preparation Standards**

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1 BS7568/A1</th>
<th>SSPC</th>
<th>NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</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>SP 10</td>
<td>2</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>SP 6</td>
<td>3</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>SP 7</td>
<td>4</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Rusted C St 2</td>
<td>SP 2</td>
<td>-</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted D St 3</td>
<td>SP 3</td>
<td>-</td>
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<tr>
<td></td>
<td>Pitted &amp; Rusted C</td>
<td>SP 25</td>
<td>-</td>
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<tr>
<td></td>
<td>Pitted &amp; Rusted D</td>
<td>SP 3</td>
<td>-</td>
</tr>
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**Application Conditions**

- Temperature: 50°F (10°C) minimum, 100°F (38°C) maximum (air, surface, and material)
- Relative humidity: 85% maximum

**Application Equipment**

- Reducer/Clean Up: Water
- Brush: Nylon/Polyester or Natural Bristle
- Roller: 1/4"-3/8" woven with solvent resistant core

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

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.

If reducer is used, add only after both components have been thoroughly mixed.

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

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Drying Schedule @ 7.0 mils wet (175 microns):

To touch: 1 hour
To recoat: minimum 8 hours, maximum 72 hours
To Cure: 7 days
Foot Traffic: 36 hours

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

Performance Tips

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

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.

For Clear applications, use the Ultra Deep Base, reduce 5% with potable water. When first mixed and applied, the material is white, but will dry Clear. DO NOT exceed 10 mils WFT. Avoid puddling material at edges or in depressions as it may not dry clear.

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

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

Always test adhesion by applying a test patch of 2-3 square feet. Allow to dry one week before checking adhesion.

Do not use hydrocarbon solvents for cleaning.

Anti-slip additives, such as H&C SharkGrip® or Armorseal Hi-Wear Additive, may be added to the coating to provide some slip resistance. This product should not be used in place of a non-skid finish.

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

Safety Precautions

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