ARMORSEAL® 8100
WATER BASED EPOXY FLOOR COATING

PRODUCT INFORMATION

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
- Resistance to MVT
- Ease of application

PRODUCT CHARACTERISTICS

<table>
<thead>
<tr>
<th>Finish:</th>
<th>Gloss or Satin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Clear, Tile Red, Deck Gray, Haze Gray and a wide range of tinted colors using CCE colorants</td>
</tr>
<tr>
<td>Safety Colors:</td>
<td>Gloss only</td>
</tr>
<tr>
<td>* For Clear, use the Ultra Deep Base (for more detail, see Application Bulletin Performance Tips)</td>
<td></td>
</tr>
<tr>
<td>Volume Solids:</td>
<td>41% ± 2%, mixed, may vary by color</td>
</tr>
<tr>
<td>Weight Solids:</td>
<td>50% ± 2%, mixed, may vary by color</td>
</tr>
<tr>
<td>VOC (EPA Method 24):</td>
<td>&lt;50 g/L; 0.42 lb/gal, mixed</td>
</tr>
<tr>
<td>Mix Ratio:</td>
<td>4:1 by volume</td>
</tr>
</tbody>
</table>

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>10.0 (250)</td>
<td></td>
</tr>
<tr>
<td>Dry mils (microns)</td>
<td>2.0 (50)</td>
<td>4.0 (100)</td>
</tr>
<tr>
<td>~Coverage sq ft/gal</td>
<td>160 (4.1)</td>
<td>320 (8.1)</td>
</tr>
</tbody>
</table>

NOTE: Brush or roll to cove 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):

<table>
<thead>
<tr>
<th>To touch:</th>
<th>1 hour</th>
<th>45 minutes</th>
<th>25 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>@ 50°F/10°C</td>
<td>50% RH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To recoat*:</td>
<td>8 hours</td>
<td>6 hours</td>
<td>3 hours</td>
</tr>
<tr>
<td>minimum:</td>
<td>30 days</td>
<td>30 days</td>
<td>30 days</td>
</tr>
<tr>
<td>maximum:</td>
<td>7 days</td>
<td>7 days</td>
<td>7 days</td>
</tr>
<tr>
<td>To Cure:</td>
<td>18 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foot Traffic:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy Traffic:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drying time is temperature, humidity, and film thickness dependent.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*If recoating after 30 days, abrade surface first.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

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 Gloss | 15-25 units @ 85º 90+ units @ 60º
Flexibility | ASTM D 522 | 180º bend 1/8” mandrel
Impact Resistance | ASTM D2794 | Direct 100 in.lb. Indirect 80 in.lb.
Pencil Hardness | ASTM D3363 | H
WVP Perms (US) | Grains/hr ft2 in Hg | Gloss – 2.0 Satin – 5.0

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**ARMORSEAL® 8100**

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**PRODUCT INFORMATION**

**Recommended Systems**

<table>
<thead>
<tr>
<th>System Type</th>
<th>Dry Film Thickness / ct.</th>
<th>Milss</th>
<th>Microns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete Floors, unpainted:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. ArmorSeal 8100 Finish</td>
<td>2.0-4.0</td>
<td>50-100</td>
<td></td>
</tr>
<tr>
<td>(reduced with one pint of water per gallon)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 cts. ArmorSeal 8100 Finish</td>
<td>2.0-4.0</td>
<td>50-100</td>
<td></td>
</tr>
<tr>
<td>Concrete Floors, previously painted:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. Spot prime bare areas with</td>
<td>2.0-4.0</td>
<td>50-100</td>
<td></td>
</tr>
<tr>
<td>ArmorSeal 8100 Finish</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 cts. ArmorSeal 8100 Finish</td>
<td>2.0-4.0</td>
<td>50-100</td>
<td></td>
</tr>
</tbody>
</table>

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

**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
  - (air, surface, and material)
- Relative humidity: 75% maximum
- At least 5°F (2.8°C) above dew point
- 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.

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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.

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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**Application Conditions**

Temperature: 50°F (10°C) minimum, 100°F (38°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

**Application Equipment**

The following is a guide. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

**Reducer/Clean Up**

Water Clear/Ultradeep tint base requires reduction of 5% by volume

**Brush**

Brush...............Nylon/Polyester or Natural Bristle Reduction.............as needed up to 10% by volume, for primer coat only

**Roller**

Cover ..................1/4"-3/8" woven with solvent resistant core Reduction.............as needed up to 10% by volume, for primer coat only

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

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**Surface Preparation Standards**

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

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continued on back
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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:

<table>
<thead>
<tr>
<th>Recommended Spreading Rate per coat:</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
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</tr>
<tr>
<td>Coverage sq ft/gal (m²/L)</td>
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<td>320 (8.1)</td>
</tr>
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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):

<table>
<thead>
<tr>
<th>@ 50°F/10°C</th>
<th>@ 77°F/25°C</th>
<th>@ 120°F/49°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>50% RH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To touch:</td>
<td>1 hour</td>
<td>1 hour</td>
</tr>
<tr>
<td>To recoat*</td>
<td>8 hours</td>
<td>6 hours</td>
</tr>
<tr>
<td></td>
<td>30 days</td>
<td>30 days</td>
</tr>
<tr>
<td>To Cure</td>
<td>7 days</td>
<td>7 days</td>
</tr>
<tr>
<td>Foot Traffic</td>
<td>36 hours</td>
<td>18 hours</td>
</tr>
</tbody>
</table>

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

*If recoating after 30 days, abrade surface first.

Pot Life: 8 hours 5½ hours 3½ hours
Sweat-in-Time: None None None

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 soap and warm water. Clean hands and tools immediately after use with soap and warm water.

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