DURA-PLATE® 8200
HIGH TEMPERATURE EPOXY

Product Information

Product Characteristics

DURA-PLATE 8200 is an advanced technology ceramic novolac epoxy. It is engineered to provide protection from crude oil mixes and aggressive chemicals stored at high temperatures in high gradient environments. It can be applied by plural or single leg application and cures to service in 24 hours in most cases.

- Excellent cathodic disbondment resistance
- One coat protection
- Low permeation rate for tank lining service
- Solvent-free
- Single coat application
- Excellent thermal compatibility with steel and concrete
- Quick return to service (24 hours in most cases)
- Resists thermal cracking
- Low odor

Finish: Gloss
Color: White, Gray
Volume Solids: 98%, ± 2%, mixed
VOC (calculated): 3.98 g/L; 0.03 lb/gal, mixed
Mix Ratio: 3A:1B 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>15.0 (375)</td>
<td>35.0 (875)</td>
<td></td>
</tr>
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<table>
<thead>
<tr>
<th>Dry mls (microns)</th>
<th>Minimum</th>
<th>Maximum</th>
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<td>15.0 (375)</td>
<td>35.0 (875)</td>
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<table>
<thead>
<tr>
<th>Coverage sq ft/gal (m²/L)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 45 (1.1)</td>
<td>105 (2.6)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theoretical coverage sq ft/gal (m²/L)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>@ 1 mil / 25 microns dtf 1572 (38.6)</td>
<td></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 @ 20 mils wet (500 microns):

<table>
<thead>
<tr>
<th>To touch:</th>
<th>To recoat:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 hours</td>
<td>8 hours</td>
</tr>
<tr>
<td>4 hours</td>
<td>3 hours</td>
</tr>
<tr>
<td>1 hour</td>
<td>1 hour</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cure to Service:</th>
<th>7 days</th>
<th>14 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 hours</td>
<td>Not Recommended</td>
<td></td>
</tr>
<tr>
<td>4 hours</td>
<td>No effect</td>
<td></td>
</tr>
</tbody>
</table>

Performance Characteristics

Test Name | Test Method | Results |
---|---|---|
Abrasion Resistance | ASTM D4060, CS-17 Wheel, 1000 cycles, 1 kg load | 35 mg loss |
Adhesion (Dry) | ASTM D4541 | >3,000 psi |
Adhesion (5 days in 158°F/70°C water) | ASTM D4541 | >3,000 psi |
Hardness, Shore D | ASTM D2240 | 88 |
Compressive Strength | ASTM D695 | 13,000 psi |
Autoclave | NACE TM0185 275°F (135°C) @ 100 psi 4 days | No effect |
Autoclave | NACE TM0185 248°F (120°C) @ 100 psi 14 days | No effect |
Impact | CSA Z245.20-14 -22°F (-30°C) @ 1.5 joules | No cracking No Holidays |
Pressurized Atlas Cell | NACE TM0174 149°F (65°C) @ 50 psi 28 days | No effect |

High temperature immersion tank lining (e.g. crude up to 275°F/135°C)
Floor and chemical trenches in process areas
Secondary containment areas
Bulk petroleum storage tank lining
Chemical process equipment and pads exposed to acids
Internal pipeline and vessel linings
Geographies with high temperature gradients
Water & Wastewater treatment plant applications

Recommended Uses

Revised: February 15, 2019

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PRODUCT INFORMATION

**Recommended Systems**

<table>
<thead>
<tr>
<th>Surface</th>
<th>Part A</th>
<th>Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel:</td>
<td>B62-480</td>
<td>B62V480</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:

- **Steel:**
  - Immersion: SSPC-SP10/NACE 2, 2-4 mil (50-100 micron) profile

- **Concrete:**
  - Atmospheric: SSPC-SP13/NACE 6, or ICRI No. 310.2R CSP 2-3
  - Immersion: SSPC-SP13/NACE 6-4.3.1 or 4.3.2, or ICRI No. 310.2R CSP 2-3

**Surface Preparation Standards**

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</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 1</td>
<td>SP 6</td>
<td>3</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 3</td>
<td>SP 1</td>
<td>4</td>
</tr>
</tbody>
</table>

Hand Tool Cleaning

- Rusted: D St 2
- Pitted & Rusted: C St 3

Power Tool Cleaning

- Rusted: D St 3
- Pitted & Rusted: C St 3

**Tinting**

Do not tint.

**Application Conditions**

Temperature: 50°F (10°C) minimum, 140°F (60°C) maximum (air, surface, and material)

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

**Ordering Information**

Packaging:
- Part A: 3 gallons (13.36L) in a 5 gallon pail
- Part B: 1 gallon (3.79L) in a 1 gallon can

**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.

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. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2-4 mils / 50-100 microns).

Concrete
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 2-3. Surfaces should be thoroughly clean and dry. Concrete must be cured at least 28 days @ 75°F (24°C) and 50% relative humidity or equivalent. Prepare surfaces in accordance with ASTM D4258 Surface Cleaning of Concrete and ASTM D4259 Abrading Concrete. Primer required.

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 2-3.

Application Conditions
Temperature: 50°F (10°C) minimum, 140°F (60°C) maximum (air, surface, and material)
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.

Clean up: .........................MEK or Acetone

Airless Spray
Pump..............................70:1 minimum
Hose...............................3/8" ID
Tip ....................................021"-.027"
Pressure.........................6000 psi minimum
Reduction..........................Not necessary, but can be reduced up to 3 oz./gal of Reducer #54 (K54) if required.

Plural Application
Pump..............................56:1 minimum
Hose...............................3/8" (9.5 mm) ID
Tip ....................................025"-.029"
Pressure.........................4000 psi minimum
Notes:
- Heat Part A to 135°F and Part B to 90°F. If you have heated hoppers, set them at 120°F for the part A and 90°F for the part B.
- If remote mixing, A-side hose of 1/2" diameter and B-side hose of 3/8" diameter and a mix fluid hose of 1/2" diameter with a 1/4" whip. Do not exceed 50 feet of mixed fluid hose to the whip.
- If mixing at the pump, would suggest the 1/2" mix fluid hose and 1/4" whip. Do not exceed 50 feet of mixed fluid hose to the whip.
- A static mix tube (3/8" x 6" from Graco, or a similar from WIWA) at the manifold and one at the mix fluid/whip connection is recommended.
- Recommend insulating the mix fluid hose with close cell foam.

Brush
Brush..............................Medium natural bristle
Reduction.........................As needed, up to 5% by volume with Reducer #54 (K54)

Roller
Cover .............................3/8" woven with solvent resistant core
Reduction.........................As needed, up to 5% by volume with Reducer #54 (K54)

If specific application equipment is not listed above, equivalent equipment may be substituted.
Surface preparation must be completed as indicated.

Mixing Instructions: Mix individual components then combine 3 parts A with 1 part B and mix until homogenous. Only mix full units. Be sure to mix material from the bottom and sides of the containers.

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

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

Drying Schedule @ 20 mils wet (500 microns):

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<tr>
<td>85% RH</td>
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To touch: 5 hours 4 hours 1 hour
To recoat:

| minimum: 8 hours | 3 hours | 1 hour |
| maximum: 14 days | 14 days | Not Recommended |

Cure to Service: 7 days 24 hours 4 hours

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

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

Pot Life: 35 minutes @ 75°F/24°C

Sweat-in-time: None required

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

Clean spills and spatters immediately with MEK or Acetone. Clean tools immediately after use with MEK or Acetone. Follow manufacturer’s safety recommendations when using any solvent.

Clean Up Instructions

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