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:

Minimum Maximum
Wet mils (microns) 15.0 (375) 35.0 (875)
Dry mils (microns) 15.0 (375) 35.0 (875)
Coverage sq ft/gal (m²/L) 45 (1.1) 105 (2.6)

Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns diff 1572 (38.6)

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):

@ 50°F/10°C @ 77°F/25°C @ 140°F/60°C 85% RH
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

Sheel Life:
Part A - 12 months, unopened
Part B - 12 months, unopened
Store indoors at 40°F (4.5°C) to 100°F (38°C).

Flash Point: 185°F (85°C), Pensky-Martins closed cup, mixed
Reducer: Reducer #54 (K54)
Clean Up: MEK or Acetone

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) @ 1000 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

Recommended Uses:

- 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
Protective & Marine Coatings

DURA-PLATE® 8200
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Revised: July 10, 2019

PRODUCT INFORMATION

Recommended Systems

<table>
<thead>
<tr>
<th>Steel:</th>
<th>Dry Film Thickness / ct. Mils</th>
<th>Microns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ct. Dura-Plate 8200</td>
<td>15.0-35.0 (375-875)</td>
<td></td>
</tr>
<tr>
<td>2 cts. Dura-Plate 8200</td>
<td>18.0-20.0 (450-500)</td>
<td></td>
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</tbody>
</table>

Concrete:

| 1 ct. Corobond 100 Epoxy Primer/Sealer | 4.0-6.0 (100-150) |
| 1 ct. Dura-Plate 8200                | 15.0-35.0 (375-875) |

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>BS 7799-A1</th>
<th>SSPC</th>
<th>NACE</th>
</tr>
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<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</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>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 6</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>Rusted</td>
<td>D St 2</td>
<td>SP 2</td>
<td>-</td>
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<td>C St 3</td>
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Note: All epoxies yellow and chalk. Contact with high purity chemicals may also adversely affect color and should have a coupon immersed in representative cargo if color is important.

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.

www.sherwin-williams.com/protective
**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.

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### Application Conditions

- **Temperature:** 50°F (10°C) minimum, 140°F (60°C) maximum (air, surface, and material)
- **Relative humidity:** 85% maximum
- At least 5°F (2.8°C) above dew point

### 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):

- To touch: 5 hours @ 50°F/10°C, 4 hours @ 77°F/25°C, 1 hour @ 140°F/60°C
- To recoat: (minimum) 8 hours @ 50°F/10°C, 3 hours @ 77°F/25°C, 1 hour @ 140°F/60°C
- Cure to Service: 7 days @ 50°F/10°C, 24 hours @ 77°F/25°C, 4 hours @ 140°F/60°C

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.

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.

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.

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