ENVIROLASTIC® 980 PA
POLYASPARTIC URETHANE

Product Information

Product Description
ENVIROLASTIC 980 PA is a fast dry, single coat, polyaspartic urethane specifically formulated for accelerated maintenance painting.
- Fast drying minimizes dust and grit "pick-up"
- Allows entire maintenance coating system to be completed in one shift
- Single coat application
- High film build in one coat
- No gassing
- Outstanding application properties

Product Characteristics

- Finish: Gloss or Semi-Gloss
- Color: Wide range of colors possible
- Volume Solids: 65% ± 2%, calculated and mixed, may vary by color
- Weight Solids: 80% ± 2%, mixed, may vary by color
- VOC (Calculated): <300 g/L; 2.5 lb/gal, unreduced
- Mix Ratio: 2:1 by volume (Pre-measured units)

Recommended Spreading Rate per coat:

<table>
<thead>
<tr>
<th>Wet mils (microns)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0 (250)</td>
<td>15.0 (375)</td>
<td></td>
</tr>
<tr>
<td>Dry mils (microns)</td>
<td>6.0 (150)</td>
<td>9.0 (225)</td>
</tr>
</tbody>
</table>

Coverage sq ft/gal (m²/L):

- Coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft:
  - Theoretical coverage sq ft/gal (m²/L): 116 (2.8) 174 (4.3)
  - Minimum:4 hours 2 hours 2 hours 1 hour
  - Maximum:3 months 3 months 3 months
  - To cure: 7 days 4 days 2 days 1 day

Drying Schedule @ 10.0 mils wet (250 microns):

- To touch: 1.5 hours 30 minutes 30 minutes 20 minutes
- To handle: 3 hours 1 hour 1 hour 1 hour
- To recoat: minimum:4 hours 2 hours 2 hours 1 hour
- maximum:3 months 3 months 3 months
- To cure: 7 days 4 days 2 days 1 day

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

Flexibility: ASTM D522 Passes

Freeze/Thaw Stability: ASTM D2246, 30 cycles No loss of Adhesion

Corrosion Resistance: ASTM D5894, 15 cycles

Cyclic Weathering: AASHTO R-31, Section 8, Test No. 3 Blister Conversion = 10; Avg Rust Creep @ Scribe <2.0 mm; Max Rust Creep @ Scribe <4.0 mm; Color Loss 1.5 dE

Salt Fog Resistance: ASTM B117, 5000 hours Rating 10 per ASTM D714 for blistering; Rating 10 per ASTM D610 for rusting

Adhesion: ASTM D4541 1750 psi

Adhesion*: AASHTO R-31, Section 8, Test No. 5 ≥ 2800 psi

Test Name: Test Method: Results

Recommended Uses

- Use directly over organic zinc rich primers or over galvanizing.
- Ideal for uses in various coatings applications where fast cure-to-service is desired, such as:
  - Bridges
  - Structural steel
  - High visibility areas
- Acceptable for use in high performance architectural applications.
- Suitable for use in USDA inspected facilities

Performance Characteristics

Substrate*: Blasted Steel

Surface Preparation*: SSPC-SP6/NACE 3

System Tested*:
- 1 ct. Corothane I Galvapac @ 3.0-4.0 mils (75-100 microns) dft
- 1 ct. Envirolastic 980 PA @ 6.0-9.0 mils (150-225 microns) dft

*unless otherwise noted below

Test Name: Test Method: Results

- Adhesion
- Adhesion*
- Corrosion Resistance
- Cyclic Weathering*
- Flexibility
- Freeze/Thaw Stability
- Freeze/Thaw Stability*
- Salt Fog Resistance
- Salt Fog Resistance*

Flash Point: 55°F (13°C), PMCC or SETA, mixed

Reducer:
- Below 60°F (21°C): MEK, R7K111
- Above 80°F (27°C): Reducer R7K216
- Brush / Roll: Reducer R7K216

Clean Up: MEK, R7K111 or R7K216

Part A - 24 months, unopened
Part B - 12 months, unopened
Store indoors at 40°F (4.5°C) to 100°F (38°C).

Flash Point: 55°F (13°C), PMCC or SETA, mixed

Reducer:
- Below 60°F (21°C): MEK, R7K111
- Above 80°F (27°C): Reducer R7K216
- Brush / Roll: Reducer R7K216

Clean Up: MEK, R7K111 or R7K216

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Revised: May 20, 2016

Part A - B65-980 SERIES
Part B - B65V980

Gloss
Semi-Gloss
Hardener

1 ct. Envirolastic 980 PA @ 6.0-9.0 mils (150-225 microns) dft meets the requirements of SSPC Paint 39, Level III (QUV).

Complies with ISO 12944-5 C5I and C5M requirements.
ENVIROLASTIC® 980 PA
POLYASPARTIC URETHANE

PART A  B65-980 SERIES
PART A  B65-985 SERIES
PART B  B65V980

Gloss  SEMI-GLOSS
      HARDENER

PRODUCT INFORMATION

RECOMMENDED SYSTEMS

<table>
<thead>
<tr>
<th>Dry Film Thickness / ct.</th>
<th>Mils</th>
<th>Microns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. Corothane I GalvaPac Zinc Primer</td>
<td>3.0-4.0</td>
<td>(75-100)</td>
</tr>
<tr>
<td>1 ct. EnviroLastic 980 PA</td>
<td>6.0-9.0</td>
<td>(150-225)</td>
</tr>
<tr>
<td>Steel:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. Zinc Clad III HS*</td>
<td>3.0-5.0</td>
<td>(75-125)</td>
</tr>
<tr>
<td>1 ct. EnviroLastic 980 PA</td>
<td>6.0-9.0</td>
<td>(150-225)</td>
</tr>
<tr>
<td>Galvanizing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. EnviroLastic 980 PA</td>
<td>6.0-9.0</td>
<td>(150-225)</td>
</tr>
<tr>
<td>Steel:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. Macropoxy 646</td>
<td>3.0-5.0</td>
<td>(75-250)</td>
</tr>
<tr>
<td>1 ct. EnviroLastic 980 PA</td>
<td>6.0-9.0</td>
<td>(150-225)</td>
</tr>
<tr>
<td>Steel:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. Zinc Clad DOT</td>
<td>2.0-4.0</td>
<td>(50-100)</td>
</tr>
<tr>
<td>1 ct. EnviroLastic 980 PA</td>
<td>6.0-9.0</td>
<td>(150-225)</td>
</tr>
<tr>
<td>Previously Painted Surfaces:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. EnviroLastic 980 PA</td>
<td>4.0-7.0</td>
<td>(100-200)</td>
</tr>
<tr>
<td>Steel:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. Zinc Clad III HS</td>
<td>3.0-5.0</td>
<td>(75-125)</td>
</tr>
<tr>
<td>1 ct. EnviroLastic 980 PA</td>
<td>6.0-9.0</td>
<td>(150-225)</td>
</tr>
<tr>
<td>Steel:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. Zinc Clad III HS*</td>
<td>3.0-5.0</td>
<td>(75-125)</td>
</tr>
<tr>
<td>1 ct. Macropoxy 646 FC</td>
<td>3.0-6.0</td>
<td>(75-150)</td>
</tr>
<tr>
<td>1 ct. EnviroLastic 980 PA</td>
<td>4.0-7.0</td>
<td>(100-175)</td>
</tr>
</tbody>
</table>

Other acceptable high performance primers:
Fast Clad Zinc HS
Steel Spec Epoxy Primer
Zinc Clad IV

*Tint with Maxiton colorants only into Part A Ultra Deep at 100% tint strength and 150% tint strength for Extra White. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

Temperature: 30°F (-1.1°C) minimum, 120°F (49°C) maximum
Relative humidity: 85% maximum

ORDERING INFORMATION

Packaging:
Part A: 2 qts. (1.9L) gallon can
Part B: 1 qt. (0.95L) quart can
Part A: 3.33 gallon (12.59L) pail
Part B: short filled 2 gallon (6.31L) pail

Weight: 12.1 ± 0.2 lb/gal ; 1.45 Kg/L, mixed (may vary with color)

SAFETY PRECAUTIONS

Tint with Maxiton colorants only into Part A Ultra Deep at 100% tint strength and 150% tint strength for Extra White. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

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.

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.

Iron & Steel (primer required)
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Galvanized Steel
Surface Preparation Specification SSPC-SP 16 must be followed obtaining a surface profile of minimum 2.0 mils (50 microns).

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.

### 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 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>C St 2</td>
<td>C St 2</td>
<td>SP 5</td>
<td>1</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted</td>
<td>D St 2</td>
<td>SP 3</td>
<td>-</td>
</tr>
</tbody>
</table>

### Application Conditions

- **Temperature:**
  - 30°F (-1.1°C) minimum, 120°F (49°C) maximum
  - 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.

**Reducer:**
- Below 80°F .......... MEK, R7K111
- Above 80°F .......... R7K216
- Brush and roll .......... R7K216

**Cleaner:** .......... MEK, R7K111, or R7K216

**Airless Spray**
- **Pump:** 30:1
- **Pressure:** 2800 - 3000 psi
- **Hose:** 3/8" ID
- **Tip:** .017" - .021"
- **Filter:** 60 mesh
- **Reduction:** As needed up to 5% by volume

**Conventional Spray**
- **Gun:** Devilbiss
- **Air Nozzle:** 765 Devilbiss A7
- **Atomization Pressure:** 50-70 psi
- **Reduction:** As needed up to 5% by volume

**Brush (small areas only)**
- **Brush:** Natural Bristle
- **Reduction:** R7K216, up to 5% by volume

**Roller (small areas only)**
- **Cover:** 1/4" woven with solvent resistant core
- **Reduction:** R7K216, up to 5% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.
**ENVIROLASTIC® 980 PA**

**POLYASPARTIC URETHANE**

**APPLICATION BULLETIN**

5.53

**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 2 parts by volume of Part A with 1 part by volume of Part B. Thoroughly agitate the mixture with power agitation.

If reducer solvent 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>Wet mils (microns)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry mils (microns)</td>
<td>6.0 (150)</td>
<td>9.0 (225)</td>
</tr>
<tr>
<td>~Coverage sq ft/gal (m²/L)</td>
<td>116 (2.8)</td>
<td>174 (4.3)</td>
</tr>
<tr>
<td>Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft</td>
<td>1042 (25.5)</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Spreading Rate per coat:**

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

**Drying Schedule @ 10.0 mils wet (250 microns):**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To touch</th>
<th>To handle</th>
<th>To recoat</th>
<th>To cure</th>
</tr>
</thead>
<tbody>
<tr>
<td>30°F/-1.1°C</td>
<td>1.5 hours</td>
<td>3 hours</td>
<td>4 hours</td>
<td>7 days</td>
</tr>
<tr>
<td>50°F/10°C</td>
<td>30 minutes</td>
<td>1 hour</td>
<td>2 hours</td>
<td>4 days</td>
</tr>
<tr>
<td>80°F/27°C</td>
<td>30 minutes</td>
<td>2 hours</td>
<td>2 hours</td>
<td>2 days</td>
</tr>
<tr>
<td>110°F/44°C</td>
<td>20 minutes</td>
<td>1 hour</td>
<td>1 hour</td>
<td>1 day</td>
</tr>
</tbody>
</table>

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 MEK or R7K111. Clean tools immediately after use with MEK or R7K111. Follow manufacturer's safety recommendations when using any solvent.

**.performance Tips**

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

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.

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.

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

Do not use Quik-Thane Urethane Accelerator.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

Not intended for use with universal primers.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with MEK or R7K111.

When used as part of a rapid recoat system for bridge maintenance painting over Corothane I Galvapac Primer, use 4 oz. per gallon of the KA Accelerator, B65V11, in the Galvapac Primer. This will allow topcoating within 1-2 hours.

When zinc primers and/or OAP pigments are used, a dedicated pump is recommended to prevent residual product in subsequent coats. If a dedicated pump is not used lines must be thoroughly cleaned.

Mixed coating is sensitive to water. Use water traps in all air lines.

Moisture contact can reduce pot life and affect gloss and color.

Pot life will be shorter with high humidity and large volume of material.

Recoat time may be shorter with high humidity during curing / drying stages.

Floating a small amount of MEK or R7K111 over the top of mixed material may help extend pot life.

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

**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.

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