ENVIROLASTIC® PA POLYASPARTIC

Product Information

**Product Description**

ENVIROLASTIC PA POLYASPARTIC is a 100% solids, spray applied, aliphatic polyaspartic coating with excellent color retention, gloss and UV stability. It can be applied at thicknesses of 8-12 mils (200-300 microns) in a single pass on horizontal surfaces or multiple passes on vertical surfaces.

- Rapid cure, short downtime
- High abrasion resistance
- Chemical resistant
- Application in temperatures as low as 20°F (-7°C)
- Seamless, flexible, and waterproof
- Tenacious bond to epoxy, polyurea, concrete and steel
- No VOCs and low odor

**Product Characteristics**

<table>
<thead>
<tr>
<th>Finish:</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color:</td>
<td>Select colors available</td>
</tr>
<tr>
<td>Volume Solids:</td>
<td>100%</td>
</tr>
<tr>
<td>VOC (calculated):</td>
<td>&lt;50 g/L; 0.42 lb/gal</td>
</tr>
<tr>
<td>Mix Ratio:</td>
<td>1:1</td>
</tr>
</tbody>
</table>

**Recommended Spreading Rate per coat:**

<table>
<thead>
<tr>
<th>Horizontal</th>
<th>Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>Max.</td>
</tr>
<tr>
<td>Wet mils (microns)</td>
<td>8.0</td>
</tr>
<tr>
<td>Dry mils (microns)</td>
<td>8.0</td>
</tr>
<tr>
<td>~Coverage sq ft/gal (m²/L)</td>
<td>134</td>
</tr>
<tr>
<td>Theoretical coverage sq ft/gal(m²/L) @ 1 mil/25 micron dft</td>
<td>1600</td>
</tr>
</tbody>
</table>

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

- @ 73°F/23°C, 50% RH
- To touch: 60 minutes
- To recoat:
  - minimum: 2 hours
  - maximum: 16 hours
- Gel time: 20 minutes
- Tack free: 60 minutes
- Foot traffic: 2 hours
- To cure: 24 hours

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

**Test Name** | **Test Method** | **Results**
--- | --- | ---
Abrasion Resistance | ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load | 63 mg loss
Durometer Hardness | ASTM D2240 | Shore D-60
Gardner Impact | ASTM D2794 (1/32" steel panels) | >160 in-lbs, direct and indirect
Gloss 60° | ASTM D523 | 90+
Mandrel Bend | ASTM D1737 (1/8" steel panel) | Pass
Surface Burning | ASTM E84 | Rating - Class 2; Flame Spread - 30; Smoke Density - 15
Tear Strength | ASTM D624 | 340 psi
Tensile Elongation | ASTM D638 | 120%
Tensile Modulus | ASTM D638 | 100% Modulus: psi; 300% Modulus: psi
Tensile Strength | ASTM D638 | 3,300 psi

**Test Name**

- Abrasion Resistance
- Durometer Hardness
- Gardner Impact
- Gloss 60°
- Mandrel Bend
- Surface Burning
- Tear Strength
- Tensile Elongation
- Tensile Modulus
- Tensile Strength

**Recommended Uses**

Designed for use as an aliphatic abrasion resistant topcoat for polyurea and epoxy or as a stand alone system over properly prepared substrates of concrete or steel in atmospheric exposure.

Ideal applications include:

- Bridge coatings
- Industrial equipment
- Deck coatings
- Rail cars
- Cold storage/low temperature applications
- Processing area floors and walls
- Acceptable for use in USDA inspected facilities

**Performance Characteristics**

- Shelf Life: 12 months, unopened
- Store indoors at 70°F (21°C) to 90°F (32°C)
- Flash Point: >210°F (99°C)
- Reducer: Not recommended
- Clean Up: Butyl Cellusolve™ (R6K25) or Dowanol PM™ (Both A & B Sides)

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continued on back
**PRODUCT INFORMATION**

Revised: October 1, 2018

**RECOMMENDED SYSTEMS**

<table>
<thead>
<tr>
<th>Surface Type</th>
<th>Dry Film Thickness / ct.</th>
<th>Condition of Surface</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steel, atmospheric:</strong></td>
<td></td>
<td>ISO 8501-1 BS7097-A1</td>
</tr>
<tr>
<td>1 ct. EnviroLastic AR425</td>
<td>40.0-60.0 (1000-1500)</td>
<td>Sa 3</td>
</tr>
<tr>
<td>1 ct. EnviroLastic PA</td>
<td>8.0-12.0 (200-300)</td>
<td>Sa 2</td>
</tr>
<tr>
<td><strong>Steel, atmospheric:</strong></td>
<td></td>
<td>Swedish Std. SSPC NACE</td>
</tr>
<tr>
<td>1 ct. EnviroLastic PA</td>
<td>8.0-12.0 (200-300)</td>
<td>NACE 1</td>
</tr>
<tr>
<td><strong>Concrete (containment and flooring):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. Corobond HS Epoxy Primer</td>
<td>3.0-4.0** (75-100)**</td>
<td>Sa 3</td>
</tr>
<tr>
<td>1 ct. EnviroLastic AR425</td>
<td>40.0-60.0 (1000-1500)</td>
<td>Sa 2.5</td>
</tr>
<tr>
<td>1 ct. EnviroLastic PA</td>
<td>8.0-12.0 (200-300)</td>
<td>Sa 2</td>
</tr>
<tr>
<td><strong>Concrete (low temperature or fast set):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. EnviroLastic LT Primer</td>
<td>2.0-3.0 (50-75)</td>
<td>Sa 3</td>
</tr>
<tr>
<td>1 ct. EnviroLastic PA</td>
<td>8.0-12.0 (200-300)</td>
<td>Sa 2</td>
</tr>
<tr>
<td><strong>Concrete (pedestrian deck coating):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ct. Corobond HS Epoxy Primer</td>
<td>3.0-4.0** (75-100)**</td>
<td>Sa 3</td>
</tr>
<tr>
<td>1 ct. EnviroLastic AR425</td>
<td>30.0-40.0 (750-1000)</td>
<td>Sa 2.5</td>
</tr>
<tr>
<td>1 ct. EnviroLastic PA</td>
<td>8.0-12.0 (200-300)</td>
<td>Sa 2</td>
</tr>
<tr>
<td>1 ct. Broadcast aggregate 40-60 mesh sand .02 lbs per square foot</td>
<td>40-60</td>
<td></td>
</tr>
<tr>
<td>1 ct. EnviroLastic PA</td>
<td>8.0-12.0 (200-300)</td>
<td></td>
</tr>
</tbody>
</table>

*Apply @ 4.0-5.0 mils (100-125 microns) dft for vertical applications

**Refer to Performance Tips section

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

**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.

**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:**
  - Atmospheric: SSPC-SP6/NACE 3, 2 mils (50 microns) profile
  - Concrete & Masonry: SSPC-SP13/NACE 6 or ICRI No. 310.2 CSP 3-5. Primer required.

**Surface Preparation Standards**

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</th>
<th>BS7097-A1</th>
<th>SSIS055900</th>
<th>SSPC 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>Rusted</td>
<td>Rusted</td>
<td>SP 2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Pitted &amp; Rusted</td>
<td>Pitted &amp; Rusted</td>
<td>SP 3</td>
<td>-</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted</td>
<td>Rusted</td>
<td>SP 3</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Pitted &amp; Rusted</td>
<td>Pitted &amp; Rusted</td>
<td>SP 3</td>
<td>-</td>
</tr>
</tbody>
</table>

**TINTING**

Do not tint.

**APPLICATION CONDITIONS**

Temperature:

- Material: 65°F (18°C) minimum, 150°F (66°C) maximum
- Air and surface: 20°F (-7°C) minimum, 120°F (49°C) maximum
- At least 5°F (2.8°C) above dew point
- Relative humidity: 80% maximum

Refer to product Application Bulletin for detailed application information.

**ORDERING INFORMATION**

Packaging:

- Part A: 1 gal (3.78L), 5 gal (18.9L), drums
- Part B: 1 gal (3.78L), 5 gal (18.9L), drums

**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.

Iron & Steel (atmospheric service)
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. 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.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2, CSP 3-5. 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 03732 Concrete Surface Preparation.

Primer is required on concrete.

Surface Preparation Standards

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1 BS5709:A1</th>
<th>Swedish Std SIS055900</th>
<th>SSPC NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>Sa 3 SP 5</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2.5</td>
<td>Sa 2.5</td>
<td>Sa 2.5 SP 5</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>Sa 2</td>
<td>Sa 2 SP 5</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>Sa 1</td>
<td>Sa 1 SP 7</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Rusted Pitted &amp; Rusted</td>
<td>DSt 2</td>
<td>DSt 2 SP 2</td>
</tr>
<tr>
<td></td>
<td>Rusted</td>
<td>CSt 2</td>
<td>CSt 2 SP 2</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted Pitted &amp; Rusted</td>
<td>DSt 3</td>
<td>DSt 3 SP 3</td>
</tr>
<tr>
<td></td>
<td>Rusted</td>
<td>CSt 3</td>
<td>CSt 3 SP 3</td>
</tr>
</tbody>
</table>

Temperature: 65°F (18°C) minimum, 150°F (66°C) maximum
Air and surface: 20°F (-7°C) minimum, 120°F (49°C) maximum At least 5°F (2.8°C) above dew point
Relative humidity: 80% maximum

Plural Component Heated Spray Equipment:
Equipment......................Gusmer H-20/35, HV 20/35
Gun......................GX-8
Fluid Pressure................1800 psi
Air Pressure ..............100 psi
Inlet Strainer Screen.....30 mesh
Gun Screen .................80 mesh
Material
Part A..................100°F-120°F (38°C-49°C)
Part B..................120°F-140°F (49°C-60°C)
Hose....................120°F-140°F (49°C-60°C)

Brush
Brush..........................Nylon/polyester natural bristle brush

Roller
Cover..........................3/8” woven

If specific application equipment is not listed above, equivalent equipment may be substituted.
Recommended spreading rate may adversely affect coating performance.

Application of coating above maximum or below minimum performance.

Mixing Instructions: Agitate resin blend (Part B) component thoroughly with a mechanical mixer before use to disperse pigment and assure homogeneity. Do not thin.

Caution: Do not agitate in air and moisture.

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

<table>
<thead>
<tr>
<th>Horizontal</th>
<th>Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet mils</td>
<td>Min.</td>
</tr>
<tr>
<td>8.0</td>
<td>200</td>
</tr>
<tr>
<td>Dry mils</td>
<td>(microns)</td>
</tr>
<tr>
<td>8.0</td>
<td>200</td>
</tr>
</tbody>
</table>

Coverage sq ft/gal (m²/L)

Theoretical coverage sq ft/gal (m²/L) @ 1 mil (25 microns dft) = 1600 (39.2)

Vertical applications may require multiple passes at 4-5 mil (100-125 micron) dft/cm.

Drying Schedule @ 10.0 mils wet (250 microns):

- @ 73°F/23°C
- 50% RH
- To touch: 60 minutes
- To recoat:
  - minimum: 2 hours
  - maximum: 16 hours
- Gel time: 20 minutes
- Tack free: 60 minutes
- Foot traffic: 2 hours
- To cure: 24 hours

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

Cleaning Instructions: Clean spills and spatters immediately with Butyl Cellusolve™ (R6K25) or Dowanol PM™. Clean tools and equipment immediately after use (including both "A" and "B" sides of plural component spray system) with Butyl Cellusolve™ (R6K25) or Dowanol PM™.

Caution: Do not agitate in air and moisture.

For concrete, always perform Calcium Chloride test as per ASTM F1869. Do not proceed with MVE >3 lbs.

**Where primers are used, do not fill the profile on concrete or steel with excess primer. Topcoat epoxy primers immediately after they become tack free. "Tack free" is defined as slight to medium pressure with a gloved hand, placed on a primed surface, that when lifted shows a slight imprint or distortion to the surface, with no transfer of primer to the glove.

For steel, stripe coat all chine, welds, bolted connections, and sharp angles to prevent early failure in these areas.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Butyl Cellusolve™ (R6K25) or Dowanol PM™.

While spraying, 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.

Caution: For applications requiring brush or roller, it is critical that the application be planned carefully so as to maintain a wet edge. Mix small amounts, immediately apply material. Warm temperatures and high humidity accelerate the cure. Thinner applications will cure more quickly. It may be difficult to eliminate roller or brush marks. Always perform a test application off target to become familiar with the material workability under job conditions.

Do not agitate in air and moisture.

Consult your Sherwin-Williams representative for specific application and performance recommendations.

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

Safety Precautions

Refer to the MSDS sheet before use.

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Warranty

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