Product Description

ENVIROLASTIC® 940 LV is a high build, direct-to-metal polyaspartic coating that can be applied in a single coat. This fast drying, <250 g/l VOC formula reduces dirt pick up, improves productivity and can be applied at temperatures as low as 35°F.

- Single coat application
- Direct to metal
- Corrosion resistant
- High film build in one coat
- No gassing
- Outstanding application properties
- Cures quickly to improve productivity

Recommended Uses

- Direct to properly prepared steel and galvanizing in industrial environments
- Replaces conventional epoxy/urethane systems
- Ideal for maintenance or new construction applications
- Suitable for use in USDA inspected facilities
- Acceptable for use in high performance architectural applications
- Suitable for use in the Mining & Minerals Industry

Product Characteristics

Finish: Semi-Gloss
Color: Extra White and Ultradeep tint bases, Safety Yellow, Safety Red, Black
Volume Solids: 71% ± 2%, mixed, may vary by color
Weight Solids: 85% ± 2%, mixed, may vary by color
VOC (EPA Method 24): 220 g/L; 1.84 lb/gal, mixed/unreduced may vary by color
Mix Ratio: 2:1 by volume

Recommended Spreading Rate per coat:

<table>
<thead>
<tr>
<th>Wet mils (microns)</th>
<th>9.0 (225)</th>
<th>13.0 (325)</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>127 (3.2)</td>
<td>190 (4.7)</td>
</tr>
</tbody>
</table>

Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft: 1139 (28.4)

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

Performance Characteristics

Substrate*: Steel
Surface Preparation*: SSPC-SP10/NACE 2
System Tested*: 1 ct. Envirolastic® 940 LV @ 6.0-9.0 DFT

*unless otherwise noted below

Test Name | Test Method | Results
--- | --- | ---
Abrasion Resistance | ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load | 184 mg loss
Adhesion | ASTM D4541 | 1522 psi
Corrosion Weathering | ASTM D5894 2000 hours | rust 10, scribe creep 8, blistering 10
Direct Impact Resistance | ASTM D2794 | 30 in. lb.
Dry Heat Resistance | ASTM D2485 | 200°F (93°C)
Flexibility | ASTM D522 180° Bend 1/2" Mandrel Passes | 6/2" Mandrel Passes
Pencil Hardness | ASTM D3363 | 6H
Salt Fog | ASTM B117 1000 hours | rust 10, scribe creep 7, blistering 10
Indirect Impact Resistance | ASTM D2794 | 10 in. lb.

Shelf Life:

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:

109°F (42°C), mixed (Seta Flash)

Reductor/Clean Up:

Reducer R7K216, MEK
R6K10, R7K111
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:
- Iron & Steel: SSPC-SP6/NACE 3, 2 mil (50 micron) profile
- Galvanizing: SSPC-SP16, 2 mil (50 micron) profile

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 2</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 2</td>
<td>SP 6</td>
<td>3</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 3</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>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted</td>
<td>D St 3</td>
<td>SP 3</td>
</tr>
<tr>
<td>Brush-Off Blast (Galv.)</td>
<td>Rusted</td>
<td>D St 3</td>
<td>SP 16</td>
</tr>
</tbody>
</table>

Tinting

Tint with Maxitoner 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: 35°F (1.6°C) minimum, 120°F (49°C) maximum
- (air, surface, and material)
- At least 5°F (2.8°C) above dew point
- 85% maximum

Refer to product Application Bulletin for detailed application information.

Ordering Information

Packaging:
- .75 gallon (2.85L) kit
  - Part A: ~2 qts. (1.9L) in a 1 gallon can
  - Part B: ~1 qt. (0.95L) in a 1 quart can
- 5 gallon (18.32L) kit
  - Part A: ~3.33 gallons (12.04L) in a 5 gallon pail
  - Part B: ~1.66 gallons (6.28L) in a 2 gallon pail

Weight: 11.4 ± 0.2 lb/gal ; 1.4 Kg/L, mixed, may vary with color

Safety Precautions

Refer to the SDS 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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Surface Preparation Standards

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<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1: BS 7709-1</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 6</td>
<td>5</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>SP 7</td>
<td>4</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Rusted</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Pitted &amp; Rusted</td>
<td>SP 2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Rusted</td>
<td>SP 3</td>
<td>-</td>
</tr>
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</tr>
<tr>
<td></td>
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<td>-</td>
<td>SP 16</td>
</tr>
</tbody>
</table>

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
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.

Aluminum
Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. Primer required.

Galvanized Steel
Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1 (recommended solvent is VM&P Naphtha). When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP16 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime/paint the area the same day as cleaned. A surface profile of minimum 2.0 mils (50 microns) is recommended.

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.

Application Conditions

Temperature:
35°F (1.6°C) minimum, 120°F (49°C) maximum
(at least 5°F (2.8°C) above dew point)

Relative humidity:
85% maximum

Application Equipment

Airless Spray
Pump.........................30:1 Airless spray pump
Gun.........................Airless gun
Pressure*....................2200 - 2700 psi
Hose.........................1/4" ID
Tip.........................0.517" -.521"
Filter.......................60 mesh
Reduction...................As needed up to 5% by volume

Conventional Spray
Gun.........................Binks 95
Cap..........................63P
Fluid Tip....................67
Atomization Pressure......50-70 psi
Fluid Pressure.............20-25 psi
Reduction...................As needed, up to 10% by volume

Brush (small areas only)

Reduction...................As needed up to 5% by volume

Roller (small areas only)
Cover .................1/4" woven with solvent resistant core
Reduction...................As needed up to 5% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.
ENVIROLASTIC® 940 LV
POLYASPARTIC

APPLICATION BULLETIN

5.55

Rev. Date: September 16, 2019

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.

Clean spills and spatters immediately with MEK, R6K10. Clean tools recommended spreading rate may adversely affect coating.

Application of coating above maximum or below minimum rate as indicated below:

Recommended Spreading Rate per coat:

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wet mils (microns)</td>
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<td>1139 (28.4)</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 @ 10.0 mils wet (250 microns):

<table>
<thead>
<tr>
<th></th>
<th>@ 35°F/4.4°C</th>
<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>50% RH</td>
<td>50% RH</td>
<td>50% RH</td>
<td></td>
</tr>
<tr>
<td>To touch</td>
<td>2.5 hours</td>
<td>2 hours</td>
<td>1 hour</td>
<td>30 minutes</td>
</tr>
<tr>
<td>To handle</td>
<td>12.5 hours</td>
<td>5 hours</td>
<td>3 hours</td>
<td>2.5 hours</td>
</tr>
<tr>
<td>To recoat:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>minimum:</td>
<td>13 hours</td>
<td>5 hours</td>
<td>4 hours</td>
<td>2.5 hours</td>
</tr>
<tr>
<td>maximum:</td>
<td>3 months</td>
<td>3 months</td>
<td>3 months</td>
<td>3 months</td>
</tr>
<tr>
<td>To cure:</td>
<td>7 days</td>
<td>7 days</td>
<td>4 days</td>
<td>2 days</td>
</tr>
<tr>
<td>Pot Life:</td>
<td>3 hours</td>
<td>3 hours</td>
<td>2 hours (unreduced)</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Sweat-in-Time:</td>
<td>None required</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with MEK, R6K10.

Mixed coating is sensitive to water. Use water traps in all air lines. Moisture contact can reduce pot life and affect gloss and color.

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, R6K10. Clean tools immediately after use with MEK, R6K10. Follow manufacturer's safety recommendations when using any solvent.

SAFETY PRECAUTIONS

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

Performance Tips

Strip 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.

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