**PRODUCT PROFILE**

**GENERIC DESCRIPTION**

Epoxy Novolac Vinyl Ester

**COMMON USAGE**

A high molecular weight (HMW), elevated temperature-service, glass-flake-filled novolac vinyl ester lining. Can be used as a gel coat, as a stand-alone liner or as part of a full vinyl ester system. Commonly used in high temperature filtration units, bag houses, exhaust and duct work, and as a primary lining for wet chemical services. Formerly ProPolymer 4834S.

**COLORS**

901 White, 908 Lavender

**FINISH**

Semi-gloss

**COATING SYSTEM**

- **PRIMERS**: Self-priming or Series 1402
- **INTERMEDIATE**: Series 1422, 1428
- **TOPCOATS**: Series 1436, 1438, 1439

**SURFACE PREPARATION**

**STEEL**

- **Immersion Service/Severe Exposure/Elevated Temperatures**: SSPC SP5/NACE No. 1 White Metal Blast Cleaning or ISO No. 22 Blast Cleaning to Visually Clean with a minimum angular anchor profile of 3.0 mils (75 microns) is required.
- **Non-Immersion Service**: SSPC SP10/NACE No. 2 Near White Metal Blast Cleaning or ISO Sa 2 1/2 Very Thorough Blast Cleaning with a minimum angular anchor profile of 3.0 mils (75 microns) is required.

**CONCRETE**

Allow new cast-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Verify concrete dryness in accordance with ASTM F 1869, "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride" (moisture vapor transmission should not exceed three pounds per 1,000 square feet in a 24 hour period), F 2170, "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes" (relative humidity should not exceed 80%), or D 4263, "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method" (no moisture present). Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 5 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer. **Note:** This product is most commonly used on metallic substrates, contact Tnemec Technical Services to confirm an appropriate lining selection or for an alternate lining.

**TECHNICAL DATA**

**VOLUME SOLIDS**

85% (mixed). Series 1436 contains a reactive monomer and some loss will occur during application and cure. Actual solids by volume will vary depending upon temperature and air movement.

12.0 to 50.0 mils (305 to 1270 microns) per coat.

**RECOMMENDED DFT CURING TIME**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To Recoat</th>
<th>Immersion</th>
<th>Maximum Recoat</th>
</tr>
</thead>
<tbody>
<tr>
<td>90°F (32°C)</td>
<td>3 hours</td>
<td>20 hours</td>
<td>3 days</td>
</tr>
<tr>
<td>75°F (25°C)</td>
<td>4 hours</td>
<td>24 hours</td>
<td>4 days</td>
</tr>
<tr>
<td>50°F (32°C)</td>
<td>12 hours</td>
<td>4 days</td>
<td>5 days</td>
</tr>
</tbody>
</table>

**VOLATILE ORGANIC COMPOUNDS**

EPA Method 24

1.21 lbs/gallon (145 grams/litre)

Two: Part A (base) and Part B (catalyst)

**NUMBER OF COMPONENTS**

- Medium Kit: 5 gallon pail, 5.0 gallons (18.9 L)
- Small Kit: 1 gallon can, 1.0 gallons (3.7 L)

**PACKAGING**

<table>
<thead>
<tr>
<th>Yield (mixed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0 gallons (18.9 L)</td>
</tr>
<tr>
<td>1.0 gallons (3.7 L)</td>
</tr>
</tbody>
</table>

**STORAGE TEMPERATURE**

Minimum 50°F (10°C) Maximum 75°F (24°C)

**TEMPERATURE RESISTANCE**

(Dry) continuous 300°F (149°C)

**SHELF LIFE**

Part A: 3 months at 35°F to 49°F (2°C to 9°C), 2 months at 50°F to 79°F (10°C to 26°C), 1 month at 80°F to 90°F (27°C to 32°C). Do not store at temperature below 35°F (2°C) or above 90°F (32°C).

**FLASH POINT - SETA**

- Part A: 93°F (33°C)
- Part B: 153°F (60°C)

**HEALTH & SAFETY**

Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Safety Data Sheet for important health and safety information prior to the use of this product.

Keep out of the reach of children.
**APPLICATION**

### COVERAGE RATES

<table>
<thead>
<tr>
<th></th>
<th>Dry Mils (Microns)</th>
<th>Wet Mils (Microns)</th>
<th>Sq Ft/Gal (m²/Gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum</strong></td>
<td>12.0 (305)</td>
<td>14.0 (356)</td>
<td>114 (10.6)</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>50.0 (1270)</td>
<td>59.0 (1499)</td>
<td>27 (2.5)</td>
</tr>
</tbody>
</table>

Actual spreading rates will vary with surface profile, amount of overspray and surface irregularities. Application of coating below minimum or above maximum recommended dry film thickness may adversely affect coating performance. THIS PRODUCT SHOULD NOT BE APPLIED BELOW 60°F (16°C) MATERIAL TEMPERATURE.

### MIXING

Power mix contents of Part A (base) thoroughly, making sure no pigment remains on the bottom of the can. Add the Part B (catalyst) slowly to the part A while under agitation. Ensure the all Part B is blended with Part A by scraping the pail walls with a flexible spatula. Continue to agitate until thoroughly mixed.

**Note:** Do not over mix, caution should be taken to avoid shearing the glass flake. Do not use mixed material beyond pot life limits.

### THINKING

Do not thin.

### POT LIFE

45 minutes at 75°F (24°C)

**Note:** At higher temperatures pot life will decrease (use caution in spray equipment).

### APPLICATION EQUIPMENT

<table>
<thead>
<tr>
<th>Spray Gun</th>
<th>Pump Size</th>
<th>Tip Orifice</th>
<th>Atomizing Pressure</th>
<th>Mat'l Hose ID</th>
<th>Manifold Filter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graco XHF, STR-7 Gun or WIWA 500F</td>
<td>45:1, 56:1 X50 or X60</td>
<td>0.025&quot;-0.029&quot; (635-736 microns)</td>
<td>3000-4000 psi (206-275 bar)</td>
<td>See below</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Airless Spray**

**Brush:** Recommended for small areas only. Use high quality natural or synthetic bristle brushes.

**Roller:** Roller application acceptable. May require multiple coats to achieve specified thickness. Use a solvent resistant, phenolic core roller with a minimum 1/2" nap.

### SURFACE TEMPERATURE

Minimum 50°F (10°C), optimum 70°F (21°C), maximum 90°F (32°C). The surface should be dry and at least 5°F (3°C) above the dew point. At surface temperatures below 60°F (16°C), Series 1436 will not cure properly or obtain maximum chemical resistance. At relative humidities above 75%, the cure of this coating may be retarded. It is also recommended that all precautions be taken to insure that adequate forced-air ventilation exists.

### MATERIAL TEMPERATURE

For optimum application, handling and performance, the material temperature during application should be between 60°F and 90°F (16°C and 30°C). Temperature will affect the workability. Cool temperatures increase viscosity and lengthen pot life. Warm temperatures will decrease viscosity and shorten pot life.

### CLEANUP

Clean equipment immediately after use with MEK.

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