**PRODUCT PROFILE**

**GENERIC DESCRIPTION**
Fiber-Reinforced Modified Polyamine Epoxy

**COMMON USAGE**
A thick film, 100% solids, spray-applied, abrasion-resistant coating designed for wastewater immersion and fume environments. Provides excellent resistance to H2S gas permeation, protects against MIC and provides chemical resistance to severe wastewater environments. Fiber-reinforcement provides superior physical strength and higher film build.

**COLORS**
5020 Gray, 5023 Beige. **Note:** Epoxies chalk with extended exposure to sunlight.

**FINISH**
Gloss

**COATING SYSTEM**

**SURFACER/FILLER/PATCHER**
Series 215, 217, 218

**PRIMERS**
Concrete: Self-priming or Series 201.

**TOPCOATS**
Series 435 (optional)

**Note:** To minimize pinhole formation in the topcoat, it is recommended that concrete substrates be fully resurfaced and/or primed prior to topcoat application.

**SURFACE PREPARATION**
Prepare surfaces by method suitable for exposure and service. Refer to the appropriate primer data sheet for specific recommendations.

**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 surfaizer.

**OTHER SUBSTRATES**
Contact your Tnemec representative or Tnemec Technical Services.

**ALL SURFACES**
Must be clean, dry and free of oil, grease and other contaminants.

**TECHNICAL DATA**

**VOLUME SOLIDS**
100% (mixed)

**RECOMMENDED DFT**
Concrete: 50.0 to 125.0 mils (1270 to 3175 microns) in one or two coats. **Note:** Number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative.

**CURING TIME**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To Touch</th>
<th>Dry Through</th>
<th>To Place in Service</th>
<th>Max. Recoor</th>
<th>Mixed Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°F (24°C)</td>
<td>5 hours</td>
<td>14 hours</td>
<td>2 days</td>
<td>7 days</td>
<td>5 gallons (18.9 L)</td>
</tr>
<tr>
<td>55°F (13°C)</td>
<td>7 hours</td>
<td>30 hours</td>
<td>3 days</td>
<td>7 days</td>
<td>1 gallon (3.79 L)</td>
</tr>
</tbody>
</table>

**Note:** If more than 7 days have elapsed between coats, the Series 436 coated surface must be mechanically abraded before topcoating. Curing time will vary with surface temperature, air movement, humidity and film thickness.

**VOLATILE ORGANIC COMPOUNDS**
EPA Method 24:
0.01 lbs/gallon solids
0.01 lbs/gallon solids
1,604 mil sq ft/gal (39.4 m²/L at 25 microns). See APPLICATION for coverage rates.

**THEORETICAL COVERAGE**
Two: Part A (Epoxy) and Part B (Amine)

By volume: One (Part A) to one (Part B)

<table>
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**NET WEIGHT PER GALLON**
10.79 ± 0.25 lbs (4.9 ± 0.11 kg) (mixed)

**STORAGE TEMPERATURE**
Minimum 40°F (4°C) Maximum 110°F (32°C)

**TEMPERATURE RESISTANCE**
(Dry) Continuous 275°F (135°C) Intermittent 300°F (149°C)

**SHELF LIFE**
12 months at recommended storage temperature.

**FLASH POINT - Seta**
Part A: 184°F (84°C) Part B: >230°F (110°C)

**HEALTH & SAFETY**
This product contains 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.**
Before commencing, obtain and thoroughly read the Series 436 Surface Preparation and Application Guide.

<table>
<thead>
<tr>
<th>APPLICATION</th>
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</table>

### 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>Minimum</td>
<td>50.0 (1270)</td>
<td>50.0 (1270)</td>
<td>32 (3.0)</td>
</tr>
<tr>
<td>Maximum</td>
<td>125.0 (3175)</td>
<td>125.0 (3175)</td>
<td>13 (1.2)</td>
</tr>
</tbody>
</table>

Note: Recommended DFT will depend on substrate condition and system design. Refer to Recommended DFT section on page 1. Allow for overspray and surface irregularities. Film thickness is rounded to the nearest 0.5 mil or 5 microns. Application of coating below minimum or above maximum recommended dry film thickness may adversely affect coating performance.

### MIXING

Mix the entire contents of Part A and Part B separately. Scrape all of the Part A into the Part B by using a flexible spatula.

**Note:** Small kit will require the use of a separate container large enough to hold both components. Use a variable speed drill with a PS Jiffy blade and mix the blended components for a minimum of two minutes. During the mixing process, scrape the sides and bottom of the container to ensure all of Parts A and B are blended together. Apply the mixed material within pot life limits after agitation. **Note:** A large volume of material will set up quickly if not applied or reduced in volume. Mixing ratio is one to one by volume. **Caution: Do not reseal mixed material. An explosion hazard may be created. Do not attempt to split kits.**

### THINKING

**DO NOT THIN**

25 to 30 minutes at 70°F (21°C) 15 to 20 minutes at 80°F (27°C)

Material, equipment, and ambient temperatures above 80°F (27°C) will significantly reduce the spray and pot life.

### POT LIFE

15 to 20 minutes at 70°F (21°C) 5 to 10 minutes at 80°F (27°C)

### SPRAY LIFE

**Airless Spray**

<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, XTR-7</td>
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<td>45.1, 56.1, X50 or X60</td>
<td>0.041”-0.045” (1041-1143 microns)</td>
<td>1,800-2,500 psi (124-172 bar)</td>
<td>See below</td>
</tr>
</tbody>
</table>

Note: Graco H.D. RAC Housing/Guard assembly and H.D. tip sizes ranging from 0.045” to 0.051” should be used. Material needs to be gravity fed through an attached material hopper. Material will not feed through a suction tube. **Material Hose ID:** Attach (1) 25’ x 3/4” hose to the pump. Attach (1) 25’ x 1/2” hose to the 3/4” line. Attach (1) 6-10’ x 3/8” hose to the 1/2” line and gun.

**Brush or Trowel:** Recommended for small areas only.

**Note:** The Series 436 Surface Preparation and Application Guide contains important information regarding detailed equipment recommendations. Read carefully prior to application to ensure equipment is configured correctly. Contact Tnemec Technical Service for more information.

### APPLICATION EQUIPMENT

**Surf ace Temperature**

Minimum of 50°F (10°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 130°F (54°C). The substrate temperature should be at least 5°F (3°C) above the dew point.

**Material Temperature**

For optimum handling and application characteristics, both material components should be stored or conditioned between 70°F and 80°F (21°C and 27°C) 48 hours prior to use. Temperature will affect the workability which can lead to improper film formation and pin holes. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten the spray and pot life.

**Holiday Testing**

If required by project specifications, High Voltage Discontinuity (spark) testing shall be performed using a Tinker & Rasor AP®/W High Voltage Holiday Tester. Contact Tnemec Technical Service for voltage recommendations.

**Cleanup**

Flush and clean all equipment immediately after use with Tnemec’s No. 4 Thinner or MEK.

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**Warranty & Limitation of Seller's Liability:** Tnemec Company, Inc. warrants only that its coatings represented herein meet the formulation standards of Tnemec Company, Inc. **The warranty described in the above paragraph shall be in lieu of any other warranty, expressed or implied, including but not limited to, any implied warranty of merchantability or fitness for a particular purpose. There are no warranties that extend beyond the description on the face hereof. The buyer’s sole and exclusive remedy against Tnemec Company, Inc. shall be for replacement of the product in the event a defective condition of the product should be found to exist and the exclusive remedy shall not have failed its essential purpose as long as Tnemec is willing to provide comparable replacement product to the buyer. No other remedy (including, but not limited to, incidental or consequential loss) shall be available to the buyer. Technical and application information herein is provided for the purpose of establishing a general profile of the coating and proper coating application procedures. Test performance results were obtained in a controlled environment and Tnemec Company makes no claim that these tests or any other tests, accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating.**

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