PRODUCT PROFILE

GENERIC DESCRIPTION
Polyamide Epoxy

COMMON USAGE
Industry standard for potable water epoxy coatings for nearly 40 years. Known for its forgiving application characteristics in adverse and varied conditions, and for its benchmark performance.

COLORS
1211 Red, 1255 Beige, 00WH White, 15BL Tank White, 39BL Delft Blue.

Note: Epoxies chalk with extended exposure to sunlight. Lack of ventilation, incomplete mixing, miscalculation or the use of heaters that emit carbon dioxide and carbon monoxide during application and initial stages of curing may cause yellowing to occur.

SPECIAL QUALIFICATIONS
Certified by NSF International in accordance with ANSI/NSF Std. 61. Ambient air cured Series 20 is qualified for use on the interior of potable water storage tanks and reservoirs of 6,000 gallons (22,712 L) capacity or greater. Reference Tnemec’s certified product listing at www.nsf.org for details on maximum allowable DFT.

Conforms to AWWA D 102 Inside Systems No. 1 and 2. Contact your Tnemec representative for approved systems and additional information on potential uses.

COATING SYSTEM

SURFACER/FILLER/PATCHER
Series 215

PRIMERS
Self-priming or Series 1, FC20, N140, N140F, 91-H2O, 94-H2O.

TOPCOATS
Interior: Series 20, FC20, 22, N140, N140F, 141, 264, 265

Note: A maximum recoat time may apply depending on the topcoat specified.

SURFACE PREPARATION

STEEL
Immersion Service: SSPC-SP10/NACE 2 Near-White Blast Cleaning or ISO Sa 2 1/2 Very Thorough Blast Cleaning with a minimum angular anchor profile of 1.5 mils.
Non-Immersion Service: SSPC-SP6/NACE 3 Commercial Blast Cleaning or ISO Sa 2 Thorough Blast Cleaning with a minimum angular anchor profile of 1.5 mils. Note: Commercial Blast Cleaning generally produces the best coating performance for this exposure. If conditions will not permit this, in moderate exposures Series 20 may be applied to SSPC-SP2 or SP3 Hand or Power Tool Cleaned surfaces (SSPC Rust Grade Condition C).

CAST/DUCTILE IRON
All external surfaces of ductile iron pipe and fittings shall be delivered to the application facility without asphalt or any other protective lining on the exterior surface. All oils, small deposits of asphalt paint, grease, and soluble deposits should be removed and uniformly abrasive blasted using angular abrasive in accordance with NAPF 900-05-04: External Pipe Surface condition. When viewed without magnification, the exterior surfaces shall be free of all visible dirt, dust, loose annealing oxide, rust, mold coating and other foreign matter. Any area where rust reappears before application shall be reblasted. The surface shall contain a minimum angular anchor profile of 1.5 mils (38.1 microns) (Reference NACE RP0287 or ASTM D 4417 Method C).

CONCRETE
All 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 an ICRI-CSP 2-5 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.

PRIMED SURFACES
Immersion Service: Scuff the Series 20 prime coat by brush-blasting with fine abrasive before topcoating if: (a) the Series 20 prime coat has been in immersion for 60 days or longer and Series 20, FC20, L69, L69F, N69, N69F, V69, V69F, L140, L140F, N140, N140F, V140, V140F or 161 is the specified topcoat; (b) the Series 20 prime coat has been in immersion for exposure for 7 days or longer and Series 264 or 265 is the specified topcoat.

Note: A maximum recoat time may apply depending on the topcoat specified.

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

TECHNICAL DATA

VOLUME SOLIDS
57.0 ± 2.0% (mixed) ↑

RECOMMENDED DFT
2.0 to 6.0 mils (50 to 150 microns) per coat. Note: Dry film thickness that exceeds published recommendations but is in compliance with SSPC PA-2 and ANSI/NSF Std. 61 certifications, is acceptable. 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>To Handle</th>
<th>To Recoat</th>
<th>Immersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>90°F (32°C)</td>
<td>1 hour</td>
<td>5-7 hours</td>
<td>6-8 hours</td>
<td>4-5 days</td>
</tr>
<tr>
<td>80°F (27°C)</td>
<td>1.5 hours</td>
<td>7-9 hours</td>
<td>8-10 hours</td>
<td>6-7 days</td>
</tr>
<tr>
<td>70°F (21°C)</td>
<td>2 hours</td>
<td>10-12 hours</td>
<td>12-14 hours</td>
<td>7-10 days</td>
</tr>
<tr>
<td>60°F (16°C)</td>
<td>3 hours</td>
<td>16-20 hours</td>
<td>20-24 hours</td>
<td>10-12 days</td>
</tr>
<tr>
<td>50°F (10°C)</td>
<td>4 hours</td>
<td>24-30 hours</td>
<td>30-36 hours</td>
<td>14-16 days</td>
</tr>
</tbody>
</table>

Curing time varies with surface temperature, air movement, humidity and film thickness. Ventilation: When used in enclosed areas, provide adequate ventilation during application and cure.

Published technical data and instructions are subject to change without notice. The online catalog at www.tnemec.com should be referenced for the most current technical data and instructions or you may contact your Tnemec representative for current technical data and instructions.
Unthinned: 3.02 lbs/gallon (362 grams/litre)
Thinned 10%: 5.37 lbs/gallon (404 grams/litre)†

Unthinned: 4.18 lbs/gal solids
Thinned 10%: 5.16 lbs/gal solids

914 mil sq ft/gal (22.4 m²/L at 25 microns). See APPLICATION for coverage rates.†

<table>
<thead>
<tr>
<th>Packaging</th>
<th>Large Kit</th>
<th>Part A</th>
<th>Part B</th>
<th>Yield (mixed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 gallon pail</td>
<td>1 gallon can</td>
<td>5 gallon pail</td>
<td>1 gallon can</td>
<td>10 gallons (37.9 L)</td>
</tr>
<tr>
<td>1 gallon can</td>
<td>5 gallon pail</td>
<td>2 gallons (7.56 L)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5 gallon (18.9L) pails and 1 gallon (3.79L) cans — Order in multiples of 2.

12.50 ± 0.25 lbs (5.7 ± 0.11 kg) (mixed)†

<table>
<thead>
<tr>
<th>Volatile Organic Compounds</th>
<th>Unthinned</th>
<th>Thinned 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAPs</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Theoretical Coverage</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Number of Components</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Temperature</th>
<th>Minimum 20°F (-7°C)</th>
<th>Maximum 110°F (43°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature Resistance</td>
<td>(Dry) Continuous 250°F (121°C)</td>
<td>Intermittent 275°F (135°C)</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>Part A: 24 months at recommended storage temperature.</td>
<td>Part A: 82°F (28°C)</td>
</tr>
</tbody>
</table>

| Flash Point - SETA        | Minimum 50°F (10°C) | Maximum 135°F (57°C) |
|                          | Recommended for small areas only. Use high quality natural or synthetic bristle brushes. |

| Flash Point - Seta        | Minimum 50°F (10°C) | Maximum 135°F (57°C) |
|                          | Recommended for small areas only. Use high quality natural or synthetic bristle brushes. |

<table>
<thead>
<tr>
<th>Application</th>
<th>Suggested</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage Rates</td>
<td>4.0 (100)</td>
<td>2.0 (50)</td>
<td>6.0 (150)</td>
</tr>
<tr>
<td>Dry Mils (Microns)</td>
<td>7.0 (180)</td>
<td>5.5 (90)</td>
<td>10.5 (265)</td>
</tr>
<tr>
<td>Wet Mils (Microns)</td>
<td>10.5 (265)</td>
<td>152 (14.2)</td>
<td></td>
</tr>
<tr>
<td>Sq Ft/Gal (m²/Gal)</td>
<td>229 (21.2)</td>
<td>457 (42.5)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Roller or brush application requires two or more coats to obtain recommended film thickness. 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 thicknesses may adversely affect coating performance.†

Use No. 4 Thinner. For air spray, thin up to 10% or 3/4 pint (380 mL) per gallon. For airless spray, roller or brush, thin up to 5% or 1/4 pint (190 mL) per gallon. Caution: Series 20 NSF certification is based on thinning with No. 4 Thinner. Use of any other thinner voids ANSI/NSF Std. 61 certification.

<table>
<thead>
<tr>
<th>Application Equipment</th>
<th>Air Spray</th>
<th>Airless Spray</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gun</td>
<td>DeVilbiss JGA</td>
<td>0.015&quot;-0.019&quot; (380-485 microns)</td>
</tr>
<tr>
<td>Fluid Tip</td>
<td>E 070°</td>
<td>Atomizing Pressure: 1800-5000 psi (124-207 bar)</td>
</tr>
<tr>
<td>Air Cap</td>
<td>765 or 704</td>
<td>Manifold Filter: 60 mesh (250 microns)</td>
</tr>
<tr>
<td>Air Hose ID</td>
<td>5/16&quot; or 3/8&quot; (7.9 or 9.5 mm)</td>
<td>Mat'l Hose ID: 1/4&quot; or 3/8&quot; (6.4 or 9.5 mm)</td>
</tr>
<tr>
<td>Mat'l Hose ID</td>
<td>5/8&quot; or 1/2&quot; (15 or 12.7 mm)</td>
<td>Pot Pressure: 50-80 psi (3.5-5.5 bar)</td>
</tr>
<tr>
<td>Atomizing Pressure</td>
<td>50-80 psi (3.5-5.5 bar)</td>
<td>10-20 psi (0.7-1.4 bar)</td>
</tr>
<tr>
<td>Pot Pressure</td>
<td>10-20 psi (0.7-1.4 bar)</td>
<td>10-20 psi (0.7-1.4 bar)</td>
</tr>
</tbody>
</table>

Low temperatures or longer hoses require higher pot pressure.

<table>
<thead>
<tr>
<th>Surface Temperature</th>
<th>Minimum 50°F (10°C)</th>
<th>Maximum 135°F (57°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The surface should be dry and at least 5°F (3°C) above the dew point. Coating won’t cure below minimum surface temperature.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Cleanup                | Flush and clean all equipment immediately after use with the recommended thinner or MEK. |

† Values may vary with color.

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