**PRODUCT PROFILE**

**GENERIC DESCRIPTION**
Modified Polyamine Epoxy

**COMMON USAGE**
An advanced generation, 100% solids, high-build epoxy for the protection of steel and concrete. It provides excellent resistance to abrasion and is suitable for immersion service in potable water, wastewater, crude oil, and finished fuel environments. Specialized curing mechanism allows for faster cure response with airless spray application.

**COLORS & FINISH**
WH11 Off-White, 1218 Light Blue, 1255 Beige

**SPECIAL QUALIFICATIONS**
Series 22-WH11 Off-White, 22-1218 Light Blue and 22-1255 Beige are certified by NSF International in accordance with NSF/ANSI Std. 61 and are qualified for use on tanks and reservoirs of 3,000 gallons (181,699 L) capacity or greater, pipes 48 inches (121.9 cm) diameter or greater, pumps one (1) inch (2.5 cm) diameter or greater, valves one (1) inch (2.5 cm) diameter or greater. Series 20HS, FC20HS, 91-H2O, 94-H2O, N140, N140F, V140 and V140F are the only Std. 61 certified primers for use with Series 22. Reference the "Search Listings" section of the NSF website at www.nsf.org for details on the maximum allowable DFT. Series 22 conforms to AWWA C 210.

Series 22 conforms to API 652 for lining above ground storage tanks. Series 61 is the recommended primer for use with Series 22 in crude oil or finished fuel immersion service environments. Contact your Tnemec representative for systems and additional information.

**PRODUCT DATA SHEET**

**EPOXOLINE® SERIES 22**

**SURFACE PREPARATION**

**STEEL**
Non-Immersion Service: SSPC-SP6/NACE 3 Commercial Blast Cleaning with a minimum angular anchor profile of 1.5 mils for dry film thicknesses at 16.0 to 20.0 mils.

Immersion Service: SSPC-SP10/NACE 2 Near-White Blast Cleaning with a minimum angular anchor profile of 3.0 mils for dry film thicknesses at 20.0 mils or greater.

Enclosed, Protected & Mild Environments: Contact your Tnemec representative or Tnemec Technical Service.

**WELDS**
Remove weld spatter, burrs, or protrusions; remove and/or round sharp edges; and smooth rough welds prior to abrasive blasting. Welds should be ground to remove any irregularities and are considered ready for painting when a minimum finishing level of a C designation, as defined by NACE SP0178 latest revision, has been achieved.

**DUCTILE IRON**
Contact your Tnemec Representative or Tnemec Technical Services.

**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 sq ft 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-SP15 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 too provide a minimum ICRI-CSP 5 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer. Must be clean, dry and free of oil, grease, chalk and other contaminants.

**TOPCOATS**
Series 73, 740, 750, 1028, 1029, 1074, 1074U, 1075, 1075U, 1080, 1081. Note: Series 22 exterior (sunlight) exposed for longer than maximum recoat requires scarification by abrasive blasting prior to topcoating.

**TECHNICAL DATA**

100% (mixed) †

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To Touch</th>
<th>Dry Through</th>
<th>Minimum to Recoat</th>
<th>Return to Service</th>
<th>Maximum to Recoat</th>
</tr>
</thead>
<tbody>
<tr>
<td>95°F (35°C)</td>
<td>2 1/2 hours</td>
<td>5 1/2 hours</td>
<td>4 hours</td>
<td>5 days</td>
<td>7 days</td>
</tr>
<tr>
<td>75°F (24°C)</td>
<td>7 hours</td>
<td>18 hours</td>
<td>16 hours</td>
<td>5 days</td>
<td>7 days</td>
</tr>
<tr>
<td>50°F (10°C)</td>
<td>24 hours</td>
<td>27 hours</td>
<td>32 hours</td>
<td>7 days</td>
<td>7 days</td>
</tr>
</tbody>
</table>

**Volatility Organic Compounds**

**HAPS**
Thinned: 0.0 lbs/gal solids

<table>
<thead>
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</tbody>
</table>

**VOLUME SOLIDS**

16 to 40 mils (400 to 1016 microns) in one or two coats.

**THEORETICAL COVERAGE**

1,604 sq ft/gal (39.4 m²/L at 25 microns). See APPLICATION for coverage rates. †

**COMMENTS**

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.
## APPLICATION

### COVERAGE RATES

<table>
<thead>
<tr>
<th>Dry Mils (Micsrons)</th>
<th>Wet Mils (Micsrons)</th>
<th>Sq Ft/Gal (m²/Gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>16.0 (400)</td>
<td>100 (9.3)</td>
</tr>
<tr>
<td>Maximum</td>
<td>40.0 (1016)</td>
<td>40 (3.7)</td>
</tr>
</tbody>
</table>

A minimum of 30 mils (762 microns) is recommended for crude oil and finished fuels. 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.†

### MIXING

Mix the entire contents of Part A and Part B separately. Scrape all of the Part A and Part B into a suitable container by using a flexible spatula. Use a variable speed drill with a PS Jiffy blade and mix the blended components for a minimum of two minutes. Apply the mixed material within the spray or pot life limits after agitation. For optimum application characteristics, material temperature should be between 70°F (21°C) and 80°F (27°C). **Note:** A large volume of material will gel quickly if not applied or reduced in volume. **Caution:** Do not reseal mixed material. An explosion hazard may be created.

### SPRAY LIFE

- **Unthinned:** 25 minutes at 75°F (24°C)
- **Thinned 5%:** 1 hour at 75°F (24°C) 30 minutes at 90°F (32°C)

### AIRLESS SPRAY

- **Spray Gun:** Graco XHF, XTR7
- **Tip Orifice:** 0.019”-0.023”
- **Atomizing Pressure:** 5500-6000 psi
- **Manifold Filter:** See Below
- **Pump Size:** 56.1, X50 or X60

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions. **Note:** Remove all filters. Material needs to be gravity fed through a material hopper. Material will not feed through a suction tube. **Note:** If mixed material temperature in mass exceeds 150°F (66°C), immediately purge all spray equipment and flush with clean solvent.

### CLEANUP

Flush and clean all equipment immediately after use with Tnemec No. 4 Thinner. Use Tnemec No. 68 Thinner when needed to comply with VOC regulations.

### 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 DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, ENVIRONMENTAL INJURIES OR ANY OTHER 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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**Values may vary with color.**

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