**PRODUCT PROFILE**

**GENERIC DESCRIPTION**
Modified Polyamine Epoxy

**COMMON USAGE**
An advanced generation, 100% solids, high build epoxy providing protection for the interior of steel storage tanks and vessels from various cargos including but not limited to crude oil and finished fuels. Unique curing mechanisms allow for single leg airless spray application.

**COLORS**
1254 Blue

**FINISH**
Semi-Gloss

**SPECIAL QUALIFICATIONS**
Series 322 conforms to API 652 for lining above ground storage tanks.

**COATING SYSTEM**

**SURFACER/FILLER/PATCHER**
Series 215. **Note:** For steel surfaces with isolated, heavy pitting, resurface the area with Series 215 prior to Series 322 application.

**PRIMERS**
Self-priming or Series 61, N69F, 161. **Note:** For surfaces with light to moderate pitting, priming the surface prior to the Series 322 application may help to prevent holidays in the cured film. **Note:** The following maximum recoat times apply when topcoating with Series 322; Series 61, 14 days; Series N69F and 161, 30 days. If this time limit is exceeded, or if Series N69F or 161 is exterior exposed more than 14 days, the primer must be uniformly scarified prior to topcoating. **Note:** Series N69F or 161 are for crude oil service only.

**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 3.0 mils. **Note:** For aggressive cargo exposures or immersion in elevated temperatures, an SSPC-SP10/NACE 1 or ISO Sa 3 Blast Cleaning to Visually Clean Steel with a minimum angular anchor profile of 3.0 mils may be required. Contact Tnemec Technical Services for more information.

**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. **Note:** A stripe coat of Series 61 or Series 322 should be applied to all welds, crevices, and sharp angles.

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

**TECHNICAL DATA**

**VOLUME SOLIDS**
100% (mixed) †

**RECOMMENDED DFT**
16.0 to 40.0 mils (400 to 1015 microns) in one or two coats. **Note:** For steel surfaces with pitting, recommended DFT is 30 to 40 mils (760 to 1015 microns). **Note:** Depending on the degree of pitting, a prime coat of Series 61 or resurfacing with Series 215 may help alleviate the potential for holidays in the cured film.

**CURING TIME**

<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>48 hours</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>48 hours</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>

**Note:** These cure times are based on 20.0 mil (500 micron) dry film thickness. Cure time varies with surface temperature, air movement, humidity, and film thickness. **Ventilation:** When used as a task linining or in enclosed areas, provide adequate ventilation during application and cure.

**VOLATILE ORGANIC COMPOUNDS**
Unthinned: 0.10 lbs/gallon (12 grams/litre) †
Thinned 5%: 0.44 lbs/gallon (52 grams/litre) †

**HAPS**
Unthinned: 0.0 lbs/gal solids
Thinned 5%: 0.37 lbs/gal solids

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

**NUMBER OF COMPONENTS**
Two. **Part A** (polyamine) and **Part B** (epoxy)

**MIXING RATIO**
By volume: One (Part A) to one (Part B).

**PACKAGING**

<table>
<thead>
<tr>
<th>PART A</th>
<th>PART B</th>
<th>When Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Kit</td>
<td>5 gallon pail</td>
<td>5 gallon pail</td>
</tr>
<tr>
<td>Medium Kit</td>
<td>6 gallons pail (partial fill)</td>
<td>3 gallon can (partial fill)</td>
</tr>
<tr>
<td>Small Kit</td>
<td>1 gallon can (partial fill)</td>
<td>1 gallon can (partial fill)</td>
</tr>
</tbody>
</table>

**NET WEIGHT PER GALLON**
12.70 ± 0.25 lbs (5.76 ± .11 kg) (mixed) †

**STORAGE TEMPERATURE**
Minimum 20°F (-6°C)     Maximum 110°F (43°C)

**TEMPERATURE RESISTANCE**
Chemical resistance varies depending on chemical exposure and temperature. Contact Tnemec Technical Services for more information.

**SHELF LIFE**
Part A: 12 months and Part B: 12 months at recommended storage temperature.

**FLASH POINT - SETA**
Part A and Part B: >200°F (97°C)

Note: Contact Tnemec Technical Services for more information.

© May 14, 2019 by Tnemec Company, Inc.
Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Material Safety Data Sheet for important health and safety information prior to the use of this product. Keep out of the reach of children.

**APPLICATION**

<table>
<thead>
<tr>
<th>Dry Mils (Microns)</th>
<th>Wet Mils (Microns)</th>
<th>Sq Ft/Gal (m²/Gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.0 (400)</td>
<td>16.0 (400)</td>
<td>100 (9.3)</td>
</tr>
<tr>
<td>30.0 (760)</td>
<td>50.0 (760)</td>
<td>53 (5.0)</td>
</tr>
<tr>
<td>40.0 (1015)</td>
<td>40.0 (1015)</td>
<td>43 (3.7)</td>
</tr>
</tbody>
</table>

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.

**THINNING**

May thin up to 5% or 6 fluid ounces per gallon with No. 2 Thinner. Do NOT thin in areas with strict extractable regulations.

**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)

**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, XTR7</td>
<td>N/R</td>
<td>0.019&quot;-0.023&quot;</td>
<td>5500-6000 psi</td>
<td>See Below</td>
<td>N/R</td>
</tr>
<tr>
<td>or WIWA 500F</td>
<td>56.1, X50 or X60</td>
<td>(483-585 microns)</td>
<td>(379-413 bar)</td>
<td></td>
<td>N/R</td>
</tr>
</tbody>
</table>

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 and clean with solvent.

**Plural Component Application:** Contact Tnemec Technical Service for detailed equipment requirements.

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

**Roller:** Application not recommended.

**SURFACE TEMPERATURE**

Minimum 50°F (10°C)  Maximum 130°F (54°C)

The surface temperature should be at least 5°F (3°C) above the dew point. Coating will not cure below minimum surface temperature. To avoid outgassing, concrete temperature should be stable or in a descending temperature mode.

**MATERIAL TEMPERATURE**

Prior to application, the material temperature should be between 70°F and 80°F (21°C and 27°C). It is suggested the material be stored at these temperatures at least 48 hours prior to use. Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

**HOLIDAY TESTING**

If required by the project specifications, holiday testing should be performed in accordance with NACE SP0188. Contact Tnemec Technical Service for voltage recommendations and curing parameters prior to testing.

**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.

† Values may vary with color.

**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 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. Any implied warranty not otherwise limited is hereby expressly limited to the warranty period as provided in the above warranty. The stated warranty is the sole and exclusive remedy available to the buyer. This warranty shall be void if the product is used in a manner not consistent with the product. THE BUYER’S SOLE AND EXCLUSIVE REMEDY IS THE REPLACEMENT OR REPAIR OF THE PRODUCT AT THE EXPENSE OF TNEMEC COMPANY, INC. NO OTHER REMEDY INVOKING THE PRACTICE OF ANY RELATED TEETH 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.