POTA-POX® PLUS SERIES N140

PRODUCT PROFILE

GENERIC DESCRIPTION
Polyamidoamine Epoxy

COMMON USAGE
Innovative potable water coating which offers high-build edge protection and allows for application at a wide range of temperatures (down to 35°F or 2°C with 44-700 Accelerator). For use on the interior and exterior of steel or concrete tanks, reservoirs, pipes, valves, pumps and equipment in potable water service.

COLORS
1211 Red, 1255 Beige, 00WH Tnemec White, 15BL Tank White, 35GR Black and 39BL Delft Blue. Note: Epoxies chalk with extended exposure to sunlight. Lack of ventilation, incomplete mixing, miscatalystation 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 N140 (with or without 44-700 Epoxy Accelerator) is qualified for use on tanks and reservoirs of 1,000 gallons (3,785 L) capacity or greater, pipes 18 inches (46 cm) in diameter or greater, valves four (4) inches (10 cm) in diameter or greater and fittings four (4) inches (10 cm) in diameter or greater. Conforms to AWWA D 102 Inside Systems No. 1 and No. 2 (with or without 44-700). Conforms to AWWA C 210 (without 44-700). Contact your Tnemec representative for systems and additional information.

PERFORMANCE CRITERIA
Extensive test data available. Contact your Tnemec representative for specific test results.

COATING SYSTEM

SURFACE PREPARATION
PRIMED STEEL
Immersion Service: Scarify the epoxy prime coat surface by abrasive blasting with fine abrasive before topcoating if it has been exterior exposed for 60 days or longer and N140 is the specified topcoat.

STEEL
Immersion Service: SSPC-SP10/NACE 2 Near-White Blast Cleaning with a minimum angular anchor profile of 1.5 mls. Non-Immersion Service: SSPC-SP6/NACE 3 Commercial Blast Cleaning with a minimum angular anchor profile of 1.5 mls.

CAST/DUCTILE IRON
Contact your Tnemec representative or Tnemec Technical Services.

CONCRETE
Allow new concrete to cure 28 days. For optimum results and/or immersion service, abrasive blast referencing SSPC-SP10/NACE 2 Near-White Blast Cleaning with a minimum angular anchor profile of 1.5 mls. Immersion Service—Surface must be scarified by blasting with fine abrasive after 60 days. Atmospheric Service—After 60 days, scarification or an epoxy tie-coat is required. When topcoating with Series 740 or 750, recoat time for N140 is 21 days. Contact your Tnemec representative for specific recommendations.

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

TECHNICAL DATA

VOLUME SOLIDS
67.0 ± 2.0% (mixed—A, B & 44-700 Epoxy Accelerator) †

RECOMMENDED DFT
2.0 to 10.0 mils (50 to 225 microns) per coat. Note: MIL-PRF-4556F applications require two coats at 4.0-6.0 mils (100-150 dry microns) per coat. Otherwise, the number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative.

CURING TIME AT 5 Mils DFT

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To Handle</th>
<th>To Recoit</th>
<th>Immersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>50°F (10°C)</td>
<td>24 hours</td>
<td>32 hours</td>
<td>12 to 14 days</td>
</tr>
<tr>
<td>60°F (16°C)</td>
<td>16 hours</td>
<td>22 hours</td>
<td>9 to 12 days</td>
</tr>
<tr>
<td>70°F (21°C)</td>
<td>9 hours</td>
<td>12 hours</td>
<td>7 days</td>
</tr>
<tr>
<td>80°F (27°C)</td>
<td>7 hours</td>
<td>9 hours</td>
<td>7 days</td>
</tr>
<tr>
<td>90°F (32°C)</td>
<td>5 hours</td>
<td>7 hours</td>
<td>7 days</td>
</tr>
</tbody>
</table>

Curing time varies with surface temperature, air movement, humidity and film thickness. Note: For valve applications allow 14 days cure at 75°F (24°C) prior to immersion. For pipe applications allow 30 days cure at 75°F (24°C) prior to immersion. Ventilation: When used in enclosed areas, provide adequate ventilation during application and cure. Note: Refer to product listing on www.nsf.org for specific potable water return to service information. Note: For faster curing and low temperature applications, add No. 44-700 Epoxy Accelerator, see separate product data sheet for cure information.

VOLATILE ORGANIC COMPOUNDS
Unthinned: 2.4 lbs/gallon (285 grams/litre)
Thinned 5% (*60): 2.6 lbs/gallon (311 grams/litre)
Thinned 10% (*4): 2.8 lbs/gallon (334 grams/litre) †

HAPS
Unthinned: 2.4 lbs/gal solids
Thinned 5% (*60): 2.4 lbs/gal solids
Thinned 10% (*4): 3.3 lbs/gal solids

THEORETICAL COVERAGE
1,070 mil sq ft/l (27.2 m²/L at 25 microns). See APPLICATION for coverage rates. †

NUMBER OF COMPONENTS
Two. Part A (amine) and Part B (epoxy) — One (Part A) to one (Part B) by volume.

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

Reference 44-700 Epoxy Accelerator product data sheet for its packaging information.

### Net Weight Per Gallon
12.66 ± 0.25 lbs (5.82 ± 0.11 kg) (mixed) †

### Storage Temperature
Minimum 20°F (-7°C) Maximum 110°F (43°C)

### Temperature Resistance
(Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)

### Shelf Life
Part A: 24 months; Part B: 12 months at recommended storage temperature.

### Flash Point - SETA
Part A: 82°F (28°C) Part B: 80°F (27°C) 44-700: None

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 reach of children.

---

### Application

#### Coverage Rates

<table>
<thead>
<tr>
<th>Coverage Rates</th>
<th>Dry Mils (Microns)</th>
<th>Wet Mils (Microns)</th>
<th>Sq Ft/Gal (m²/Gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggested</td>
<td>6.0 (150)</td>
<td>9.0 (230)</td>
<td>179 (16.6)</td>
</tr>
<tr>
<td>Minimum</td>
<td>2.0 (50)</td>
<td>3.0 (75)</td>
<td>537 (49.9)</td>
</tr>
<tr>
<td>Maximum</td>
<td>10.0 (225)</td>
<td>15.0 (375)</td>
<td>107 (10.0)</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. Wet 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. Reference the “Search Listings” section of the NSF website at www.nsf.org for details on the maximum allowable DFT. †

#### Mixing
1. Start with equal amounts of both Parts A & B.
2. Using a power mixer, separately stir Parts A & B.
3. (For accelerated version. If not using 44-700, skip to No. 4.)
   - Add four (4) fluid ounces of 44-700 per gallon of Part A while Part A is under agitation.
4. Add Part A to Part B under agitation, stir until thoroughly mixed.
5. Both components must be above 50°F (10°C) prior to mixing. For application of the unaccelerated version to surfaces between 50°F to 60°F (10°C to 16°C) or the accelerated version to surfaces between 55°F to 50°F (2°C to 10°C), allow mixed material to stand 30 minutes and restir before using.
6. If optimum application properties, the maternal temperature should be above 60°F (16°C).

#### Thinning
Use No. 4 or No. 60 Thinner. For air spray, thin up to 10% or 3/4 pint (380 mL) per gallon with No. 4 Thinner or thin up to 5% or 1/4 pint (190 mL) per gallon with No. 60 Thinner. For airless spray, roller or brush, thin up to 5% or 1/4 pint (190 mL) per gallon. Caution: Series N140 NSF certification is based on thinning with No. 4 or No. 60 Thinner for tanks and only No. 60 Thinner for pipe, valves and fittings. Use of any other thinner voids ANSI/NSF Std. 61 certification.

#### Pot Life
Without 44-700: 6 hours at 50°F (10°C) 4 hours at 75°F (24°C) 1 hour at 100°F (38°C)
With 44-700: 2 hours at 50°F (10°C) 1 hour at 75°F (24°C) 30 minutes at 100°F (38°C)

#### Spray Life
Without 44-700: 1 hour at 77°F (25°C) With 44-700: 30 minutes at 75°F (24°C)

Note: Spray application after listed times will adversely affect ability to achieve recommended dry film thickness.

#### Application Equipment

### Air Spray

<table>
<thead>
<tr>
<th>Gun</th>
<th>Fluid Tip</th>
<th>Air Cap</th>
<th>Air Hose ID</th>
<th>Mat'l Hose ID</th>
<th>Atomizing Pressure</th>
<th>Pot Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeVilbiss JGA</td>
<td>E</td>
<td>765 or 701</td>
<td>5/16&quot; or 3/8&quot; (7.9 or 9.5 mm)</td>
<td>3/8&quot; or 1/2&quot; (9.5 or 12.7 mm)</td>
<td>75-100 psi (5.2-6.9 bar)</td>
<td>10-20 psi (0.7-1.4 bar)</td>
</tr>
</tbody>
</table>

### Airless Spray

<table>
<thead>
<tr>
<th>Tip Orifice</th>
<th>Atomizing Pressure</th>
<th>Mat'l Hose ID</th>
<th>Manifold Filter</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.015”-0.019” (380-485 microns)</td>
<td>9000-4800 psi (207-330 bar)</td>
<td>1/4” or 3/8” (6.4 or 9.5 mm)</td>
<td>60 mesh (250 microns)</td>
</tr>
</tbody>
</table>

### Low temperatures or longer hoses require higher pot pressure. Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions.

### Rollers: Use 3/8" or 1/2" (9.5 mm to 12.7 mm) synthetic woven nap roller cover. Use longer nap to obtain penetration on rough or porous surfaces.

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

### Surface Temperature
Without 44-700: Min. 50°F (10°C), Max. 135°F (57°C) With 44-700: Min. 35°F (2°C), Max. 135°F (57°C)

The surface should be dry and at least 5°F (3°C) above the dew point. Coating will not cure below minimum surface temperature.

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

† 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 PARAGRAPHS 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 & limitation of seller’s liability: Tnemec Company, Inc. warrants only that its coatings represented herein meet the formulation standards of Tnemec Company, Inc.**

**Tnemec Company Incorporated 6800 Corporate Drive Kansas City, Missouri 64120-1372 1-800-TNEMEC1 Fax: 1-816-483-3969 www.tnemec.com**

© April 8, 2015 by Tnemec Co., Inc. **PDSN140 Page 2 of 2**