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. **Note:** Series V140 conforms with air pollution regulations limiting Volatile Organic Compounds (VOC) to a maximum of 250 grams/litre (2.08 lbs/gal). In areas requiring less than 100 grams/litre VOC, please refer to the Series L140 data sheet.

COLORS
1211 Red Oxide, 1255 Beige, 11WH White, 15BL Tank White, 35GR Black and 39BL Delft Blue. **Note:** Epoxy 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 N140 (with or without 44-700 Epoxy Accelerator) is qualified for use on tanks and reservoirs of 1,000 gallons (3,785L) capacity or greater, pipes 14 inches (30 cm) in diameter or greater and valves two (2) inches (5 cm) in diameter or greater. Series V140 is qualified for use on tanks of 20,000 gallons (75,708L) capacity or greater and valves 3/4 inch in diameter or greater. **Note:** NSF certification for Series V140 applies to colors 1255 Beige, 1211 Red and 15BL Tank White only. Conforms to AWWA D 102 Interior 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

PRIMERS

TOPOATS
**Interior:** Series L140, L140F, N140, N140F

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-SP6/NACE 3 Commercial Blast Cleaning with a minimum angular anchor profile of 1.5 mils.

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

SURFACE PREPARATION

PRIMED STEEL
**Immersion Service:** Scuff the Series N140, 20 or FC20 prime coat surface by 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 mils.

**Non-Immersion Service:** SSPC-SP6/NACE 3 Commercial Blast Cleaning with a minimum angular anchor profile of 1.5 mils.

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

CONCRETE
Fill all holes, pits, voids and cracks with 63-1500 Filler and Surfacier.

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:** Number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative.

CURING TIME AT 5 MILS DFT
Without 44-700 Accelerator:

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To Handle</th>
<th>To Reccoat</th>
<th>Immersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°F (24°C)</td>
<td>6 hours</td>
<td>9 hours*</td>
<td>7 days</td>
</tr>
</tbody>
</table>

With 44-700 Accelerator:

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To Handle</th>
<th>To Reccoat</th>
<th>Immersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°F (24°C)</td>
<td>4 hours</td>
<td>5 hours</td>
<td>7 days</td>
</tr>
<tr>
<td>65°F (24°C)</td>
<td>7-8 hours</td>
<td>9-11 hours</td>
<td>8 days</td>
</tr>
<tr>
<td>55°F (24°C)</td>
<td>12-14 hours</td>
<td>16-20 hours</td>
<td>9-10 days</td>
</tr>
<tr>
<td>45°F (24°C)</td>
<td>18-22 hours</td>
<td>28-32 hours</td>
<td>12-15 days</td>
</tr>
<tr>
<td>35°F (24°C)</td>
<td>28-32 hours</td>
<td>46-50 hours</td>
<td>16-18 days</td>
</tr>
</tbody>
</table>

CURING TIME VARIES WITH SURFACE TEMPERATURE, AIR MOVEMENT, HUMIDITY AND FILM THICKNESS.

* When using V140, recoat time is 5 hours. **Note:** For valve applications allow 14 days cure at 75°F (24°C) prior to immersion. For pipes application allow 30 days cure at 75°F (24°C) prior to immersion. Ventilation: When used in encased areas, provide adequate ventilation during application and cure.

VOLATILE ORGANIC COMPOUNDS

<table>
<thead>
<tr>
<th>Series V140</th>
<th>Unthinned: 2.4 lbs/gallon (285 grams/litre)</th>
<th>Thinned 5% (#60): 2.6 lbs/gallon (311 grams/litre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series N140</td>
<td>Unthinned: 2.4 lbs/gal solids</td>
<td>Thinned 5% (#60): 2.4 lbs/gal solids</td>
</tr>
<tr>
<td>Thinned 10% (#4): 2.8 lbs/gallon (254 grams/litre)</td>
<td>Thinned 2.5% (#4): 2.3 lbs/gal solids</td>
<td></td>
</tr>
</tbody>
</table>

HAPS

<table>
<thead>
<tr>
<th>Series V140</th>
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<td></td>
</tr>
</tbody>
</table>

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

NUMBER OF COMPONENTS
Two: Part A and Part B or Three: Part A, Part B and 44-700 Epoxy Accelerator

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PRODUCT DATA SHEET

POTA-POX® PLUS | N140 or V140

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

NET WEIGHT PER GALLON
N140: 12.66 ± 0.25 lbs (5.82 ± 0.11 kg) (mixed) V140: 13.00 ± 0.25 lbs (5.90 ± 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
24 months at recommended storage temperature.

FLASH POINT - SETA
N140 & V140 Part A: 82°F (28°C) N140 Part B: 80°F (27°C) V140 Part B: 86°F (30°C) 44-700: None

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 704</td>
<td>5/16” or 3/8” (7.9 or 9.5 mm)</td>
<td>3/8” or 1/2” (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>

Low temperatures or longer hoses require higher pot pressure.

Tip Orifice

<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>3000-4800 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>

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions.

Note: Application over inorganic zinc-rich primers: Apply a wet mist coat and allow tiny bubbles to form. When bubbles disappear in 1 to 2 minutes, apply a full wet coat at specified mil thickness.

SURFACE TEMPERATURE
Without 44-700: Minimum 50°F (10°C) Maximum 135°F (57°C)
With 44-700: Minimum 35°F (2°C) Maximum 135°F (57°C)

The surface should be dry and at least 5°F (3°C) above the dew point. Coating won’t 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.

APPLICATION

COVERAGE RATES

<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>Suggested</td>
<td>6.0 (150)</td>
<td>179 (16.6)</td>
</tr>
<tr>
<td>Minimum</td>
<td>2.0 (50)</td>
<td>537 (49.9)</td>
</tr>
<tr>
<td>Maximum</td>
<td>10.0 (225)</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 rest before using.
6. For optimum application properties, the material temperature should be above 60°F (16°C).

Note: The use of more than the recommended amount of 44-700 will adversely affect performance.

THINNING
Use No. 4 or No. 60 Thinner for N140. Use No. 4 Thinner for V140. For air spray, thin up to 10% or 5/4 pint (380 mL) per gallon with No. 4 Thinner or thin up to 5% or 1/4 pint (150 mL) per gallon with No. 60 Thinner for tanks only. For airless spray, roller or brush, thin up to 5% of 1/4 pint (100 mL) per gallon.

For air spray, Series V140, a maximum of 2.5% of No. 4 Thinner may be used to comply with VOC regulations.

POT LIFE
Without 44-700: 15 hours at 50°F (10°C) 5 hours at 77°F (25°C) 3 hours at 100°F (38°C) With 44-700: 8 hours at 55°F (2°C) 4 hours at 77°F (25°C) 1 hour at 100°F (38°C)

For airless spray, thin with No. 4 or No. 60 Thinner only. Use of any other thinner voids ANSI/NSF Std. 61 certification. Note: When using N140, use No. 4 Thinner for N140. Use No. 4 Thinner for V140. For air spray, thin up to 5% or 1/4 pint (5.2-6.9 bar) per gallon.

Note: The use of more than the recommended amount of 44-700 will adversely affect performance.

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