**PRODUCT PROFILE**

**GENERIC DESCRIPTION**
Phenalkamide Epoxy Finish

**COMMON USAGE**
A high-build, surface tolerant epoxy mastic that can be applied over light corrosion and marginally prepared steel, in low-temperatures and over dew point conditions. Series 138 stands up to the harsh atmospheric environments found in industrial facilities. Its unique phenalkamide epoxy technology resists color shift, making it an ideal finish coat for harsh conditions.

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

**FINISH**
Semi-gloss

**COATING SYSTEM**

**PRIMERS**
Self-priming or Series 90-97, 152, 133

**TOPCOATS**
Series 138, 1094, 1095, 1096. **Note:** The following maximum recoat time applies when using Series 138, 1094, 1095 or 1096: twenty one (21) days. If this time limit is exceeded, Series 138 must be uniformly scarified prior to topcoating.

**SURFACE PREPARATION**

**STEEL**
Minimum surface preparation of bare steel or previously painted steel requires a cleanliness level as defined by SSPC-SPWJ-4/NACE WJ-4 Light Cleaning by use of Low Pressure Water Cleaning (LP WC) between 3,500 and 5,000 psi using a 0 degree rotating nozzle. If all visible contaminants, loose mill scale, loose rust and other corrosion products, and loose paint have not been removed, SSPC-SP2 Hand Tool Cleaning or SSPC-SP3 Power Tool Cleaning should be employed until the surface cleanliness definition is met.

**GALVANIZED STEEL & NON-FERROUS METAL**
Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services.

**PAINTED SURFACES**
Test patch is recommended.

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

**TECHNICAL DATA**

**VOLUME SOLIDS**
79.0 ± 2.0%

**RECOMMENDED DFT**
4.0 to 10.0 mils (100 to 255 microns)

**CURING TIME**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To Handle/To Recoat</th>
<th>Max Recoat</th>
</tr>
</thead>
<tbody>
<tr>
<td>90°F (32°C)</td>
<td>4 hours</td>
<td>21 days</td>
</tr>
<tr>
<td>75°F (24°C)</td>
<td>12 hours</td>
<td>21 days</td>
</tr>
<tr>
<td>65°F (18°C)</td>
<td>16 hours</td>
<td>21 days</td>
</tr>
<tr>
<td>55°F (11°C)</td>
<td>24 hours</td>
<td>21 days</td>
</tr>
<tr>
<td>45°F (7°C)</td>
<td>48 hours</td>
<td>21 days</td>
</tr>
<tr>
<td>35°F (2°C)</td>
<td>72 hours</td>
<td>21 days</td>
</tr>
</tbody>
</table>

**VOLATILE ORGANIC COMPOUNDS**

<table>
<thead>
<tr>
<th></th>
<th>Unthinned: 1.46 lbs/gal (175 grams/litre)</th>
<th>Thinned 5% (No. 2 Thinner): 1.73 lbs/gal (208 grams/litre)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HAPS</strong></td>
<td>Unthinned: 1.60 lbs/gal solids</td>
<td>Thinned 5% (No. 2 Thinner): 2.05 lbs/gal solids</td>
</tr>
<tr>
<td><strong>THEORETICAL COVERAGE</strong></td>
<td>1267 mil sq ft/gal (31.1 m²/L at 25 microns). See APPLICATION for coverage rates.</td>
<td></td>
</tr>
<tr>
<td><strong>NUMBER OF COMPONENTS</strong></td>
<td>Two: Part A and Part B</td>
<td></td>
</tr>
</tbody>
</table>

**MIXING RATIO**
By volume: Two (Part A) epoxy to one (Part B) amine.

**PACKAGING**

<table>
<thead>
<tr>
<th></th>
<th>Part A (partially filled)</th>
<th>Part B (partially filled)</th>
<th>When Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Kit</td>
<td>1-6 gallon pail</td>
<td>1-3 gallon pail</td>
<td>5 gallons (18.9 L)</td>
</tr>
<tr>
<td>Small Kit</td>
<td>1-1 gallon can</td>
<td>1-1 gallon can</td>
<td>1 gallon (3.79 L)</td>
</tr>
</tbody>
</table>

**NET WEIGHT PER GALLON**
12.56 ± 0.25 lbs (5.7 ± .11 kg) (mixed)

**STORAGE TEMPERATURE**
Minimum 50°F (10°C) Maximum 80°F (27°C)

**TEMPERATURE RESISTANCE**
(Dry) Continuous 225°F (107°C)

**SHELF LIFE**
12 months at recommended storage temperature.

**FLASH POINT - SETA**
Part A: 82°F (28°C) Part B: 96°F (36°C)

**HEALTH & SAFETY**
This product contains chemical ingredients which are considered hazardous. Read container label warning and Safety Data Sheet for important health and safety information prior to the use of this product.

Keep out of the reach of children.
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>4.0 (100)</td>
<td>5.0 (125)</td>
<td>309 (28.7)</td>
</tr>
<tr>
<td>10.0 (255)</td>
<td>13.0 (330)</td>
<td>124 (11.5)</td>
</tr>
</tbody>
</table>

**MIXING**

Power mix contents of each container, making sure no pigment remains on the bottom. Add the contents of the can marked Part B to Part A while under agitation. Continue agitation until the two components are thoroughly mixed. Do not use mixed material beyond pot life limits. **Note:** Both components must be above 50°F (10°C) prior to mixing. For application to surfaces between 35°F to 60°F (2°C to 16°C), allow mixed material to stand thirty (30) minutes and restir before using. For optimum application properties, blended components should be above 60°F (16°C).

**THINNING**

Thin up to 5% or 1/4 pint (190 mL) per gallon with No. 2 Thinner.

**POT LIFE**

1 hour at 75°F (24°C)

**SUBSTRATE CONDITIONING**

Do not apply over puddles, ponding, or standing water. All standing and heavy accumulations of water must be removed before application. In the case of sweating pipes accumulated water must be removed. Brush, roll, or spray/backroll to displace water and create a monolithic film in direct contact with substrate.

**APPLICATION EQUIPMENT**

<table>
<thead>
<tr>
<th>Pump Size</th>
<th>Tip Orifice</th>
<th>Atomizing Pressure &amp; Mat'l Hose ID</th>
<th>Manifold Filter</th>
</tr>
</thead>
<tbody>
<tr>
<td>45:1 or greater</td>
<td>0.017&quot; - 0.021&quot; (430 - 555 microns)</td>
<td>3,500 - 4,500 psi (241 - 310 bar)</td>
<td>1/4&quot; to 1/2&quot; (6.4 - 12.7 mm)</td>
</tr>
</tbody>
</table>

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

**Roller:** Use high quality 3/8" to 1/2" synthetic woven nap roller covers.

**SURFACE TEMPERATURE**

Minimum 35°F (2°C) Maximum 135°F (57°C)

**CLEANUP**

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