PRODUCT PROFILE

GENERIC DESCRIPTION
Modified Silicone Copolymer

COMMON USAGE
A versatile silicone copolymer coating applied direct-to-metal (DTM) or as a topcoat in high-temperature coating systems. Its high-build characteristics and corrosion-inhibitive pigments provide protection to steel substrates up to 1000°F (538°C). Wide color options and superior adhesion to marginally prepared substrates make it an excellent choice for use throughout refineries, power plants, petrochemical facilities, and treatment plants. Requires a 350°F (177°C) heat cure prior to placing in service.

COLORS
Endura-Heat Standard and Custom Colors Available. Additional lead time will be required for custom colors. Important: Due to the product's high heat exposure, sheen and color variations may occur. However, these changes are aesthetic only and will not affect performance. Contact your Tnemec representative for more information.

FINISH
Flat

COATING SYSTEM

PRIMERS
Self-priming, 1505, 1528

SURFACE PREPARATION

STEEL
SSPC-SP6/NACE 3 Commercial Blast Cleaning or ISO Sa2 Thorough Blast Cleaning with a minimum angular anchor profile of 1.0 mil and maximum angular anchor profile 2.0 mils. Note: Abrasive blast cleaning generally produces the best coating performance. If conditions will not permit this, Series 1558 may be applied to SSPC-SP2 or SSPC-SP3 Hand or Power Tool Cleaned surfaces in maintenance situations where mill scale has previously been removed.

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

TECHNICAL DATA

VOLUME SOLIDS 52 ± 2.0% (mixed)

RECOMMENDED DFT
Standard Direct To Metal Service: 6.0 to 8.0 mils (150 to 200 microns). Can be achieved in two coats.
Topcoat Service: 2.0 to 3.0 mils (50 to 75 microns). Note: When Series 1558 is used as a topcoat, refer to the primer product data sheet for more information.

CURING TIME

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To Touch</th>
<th>To Handle</th>
<th>To Place in Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°F (24°C)</td>
<td>30 minutes</td>
<td>4 to 6 hours</td>
<td>24 hours</td>
</tr>
</tbody>
</table>

Important: Allow Series 1558 to ambient cure for 24 hours prior to placing in service. Material will not be fully cured until service temperature reaches 350°F (176°C).

VOLATILE ORGANIC COMPOUNDS
Unthinned: 2.81 lbs/gallon (357 grams/litre)
Thinned 10% (No. 80 Thinner): 3.18 lbs/gallon (381 grams/litre)
Thinned 10% (No. 81 Thinner): 3.22 lbs/gallon (385 grams/litre)
Thinned 10% (No. 82 Thinner): 3.29 lbs/gallon (394 grams/litre)
Thinned 12% (No. 83 Thinner): 3.48 lbs/gallon (417 grams/litre)
Thinned 40% (No. 83 Thinner): 4.60 lbs/gallon (552 grams/litre)

THEORETICAL COVERAGE
834 mil sq ft/gal (77.5 m²/L at 25 microns). See APPLICATION for coverage rates.

NUMBER OF COMPONENTS
One

PACKAGING
5 gallon (18.9 L) pails and 1 gallon (3.79L) cans.

NET WEIGHT
11.25 ± 0.25 lbs (5.09 ± .11 kg)

STORAGE TEMPERATURE
Minimum 30°F (-1°C) Maximum 110°F (43°C)

TEMPERATURE RESISTANCE
(Dry) Continuous 1000°F (538°C)

SHELF LIFE
24 months at recommended storage temperatures.

FLASH POINT - SETA
70°F (21°C)

HEALTH & SAFETY
Paint products contain 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>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0 (150)</td>
<td>8.0 (200)</td>
</tr>
<tr>
<td>11.0 (290)</td>
<td>15.0 (390)</td>
</tr>
<tr>
<td>139 (12.9)</td>
<td>104 (9.7)</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 the coating below minimum or above maximum recommended dry film thickness may adversely affect coating performance.

### Topcoat Service

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 (50)</td>
<td>3.0 (75)</td>
</tr>
<tr>
<td>4.0 (100)</td>
<td>6.0 (150)</td>
</tr>
<tr>
<td>417 (38.8)</td>
<td>278 (25.8)</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 the coating below minimum or above maximum recommended dry film thickness may adversely affect coating performance.

### Mixing

Stir thoroughly, making sure no pigment remains on the bottom of the can.

### Thinning

Thinning is not normally required. If thinning is desired, reference thinning options below. **Note:** Do not combine thinners; only one thinner should be used during each application. Reference the charts below for application recommendations.

### Air Spray or Airless Spray

#### Ambient Temperature

<table>
<thead>
<tr>
<th>Standard Application</th>
<th>Hot Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 80°F (27°C)</td>
<td>No. 80 Thinner up to 10%</td>
</tr>
<tr>
<td>Above 80°F (27°C)</td>
<td>No. 81 Thinner up to 10%</td>
</tr>
</tbody>
</table>

### Air Spray, Airless Spray, Brush or Roller

#### Substrate Temperature

<table>
<thead>
<tr>
<th>Standard Application</th>
<th>Hot Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>200°F (93°C)</td>
<td>No. 83 Thinner at 10% to 25%</td>
</tr>
<tr>
<td>400°F (149°C)</td>
<td>No. 83 Thinner at 15% to 30%</td>
</tr>
<tr>
<td>400°F (204°C)</td>
<td>No. 83 Thinner at 20% to 35%</td>
</tr>
<tr>
<td>500°F (260°C)</td>
<td>No. 83 Thinner at 25% to 40%</td>
</tr>
</tbody>
</table>

**Note:** For applications above 200°F (93°C), contact Tnemec Technical Services for specific application information.

### 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 MBC or JGA</td>
<td>E</td>
<td>765 or 78</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>60-80 psi (4.1-5.5 bar)</td>
<td>15-20 psi (1.0-1.4 bar)</td>
</tr>
</tbody>
</table>

#### Airless Spray

<table>
<thead>
<tr>
<th>Pump</th>
<th>Tip Orifice</th>
<th>Pump Pressure</th>
<th>Mat'l Hose ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>30:1</td>
<td>0.011&quot;-0.015&quot; (279-330 microns)</td>
<td>1800-2100 Psi (124-144 bar)</td>
<td>3/8&quot; (9.5 mm)</td>
</tr>
</tbody>
</table>

### Surface Temperature

Minimum 45°F (7°C)  Maximum 200°F (93°C)

**Note:** For surface temperatures exceeding 200°F (93°C), reference the hot application thinning recommendations and contact Tnemec Technical Services for specific application parameters.

### Cleanup

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