**PRODUCT PROFILE**

**GENERIC DESCRIPTION**
Modified Silicone Copolymer

**COMMON USAGE**
A modified silicone copolymer topcoat formulated for color stability and substrate protection in elevated temperatures up to 1000°F (538°C). Outperforms conventional high-temperature topcoats with exceptional color stability, resistance to thermal cycling, and cure requirements. An excellent choice for topcoating high-temperature coating systems in refineries, petrochemical plants, on water and oil pipelines, and treatment plants. Requires heat cure prior to placing in service.

**COLORS**
Endura-Heat Standard and Custom Colors Available. Additional lead time will be required for custom colors. Note: 10HT White must be heat cured at 500°F (260°C)

**FINISH**
Flat

**COATING SYSTEM**

**PRIMERS**
Series 1505

**SURFACE PREPARATION**

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

**TECHNICAL DATA**

**VOLUME SOLIDS**
45% ± 2%

**RECOMMENDED DFT**
2.0 to 3.0 mils (50 to 75 microns)

**CURING TIME**

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To Touch</th>
<th>To Handle</th>
<th>To Recoat</th>
<th>To Place in Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°F (24°C)</td>
<td>15 minutes</td>
<td>1 to 2 hours</td>
<td>1 to 2 hours</td>
<td>24 hours</td>
</tr>
</tbody>
</table>

Important: Allow Series 1556 to ambient cure for 24 hours prior to heat cure. Reference the heat cure table below. Curing time varies with surface temperature, air movement, humidity and film thickness.

**HEAT CURE**

<table>
<thead>
<tr>
<th>Cure Time</th>
<th>Minimum Temperature †</th>
<th>Maximum Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours</td>
<td>250°F (121°C)</td>
<td>500°F (260°C)</td>
</tr>
<tr>
<td>1 hour</td>
<td>475°F (246°C)</td>
<td>500°F (260°C)</td>
</tr>
</tbody>
</table>

**VOLATILE ORGANIC COMPOUNDS**

TBAC Exempt
Unthinned: 3.49 lbs/gallon (419 grams/litre)
Thinned 10% (No. 80 Thinner): 3.81 lbs/gallon (457 grams/litre)
Thinned 10% (No. 81 Thinner): 3.86 lbs/gallon (462 grams/litre)
Thinned 10% (No. 82 Thinner): 3.95 lbs/gallon (471 grams/litre)
Thinned 40% (No. 83 Thinner): 5.15 lbs/gallon (617 grams/litre)

Note: This product is not compliant in air districts that do not allow TBAC exemption.

**THEORETICAL COVERAGE**
722 mil sq ft/gal (67.1 m²/L at 25 microns.) See APPLICATION for coverage rates.

**NUMBER OF COMPONENTS**
One

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

**NET WEIGHT PER GALLON**
13.24 ± 0.25 lbs (6.0 ± 0.11 kg)

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

**TEMPERATURE RESISTANCE**
(Dry) Continuous 1,000°F (538°C)

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

**FLASH POINT - SETA**
85°F (29°C)

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></th>
<th>Dry Mils (Microns)</th>
<th>Wet Mils (Microns)</th>
<th>Sq Ft/Gal (m²/Gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>2.0 (50)</td>
<td>4.0 (110)</td>
<td>361 (33.5)</td>
</tr>
<tr>
<td>Maximum</td>
<td>3.0 (75)</td>
<td>6.5 (170)</td>
<td>241 (22.4)</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 at 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

<table>
<thead>
<tr>
<th>Ambient Temperature</th>
<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>
<td>N/A</td>
</tr>
<tr>
<td>Above 80°F (27°C)</td>
<td>No. 81 Thinner up to 10%</td>
<td>NA</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Substrate Temperature</th>
<th>Standard Application</th>
<th>Hot Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>200°F (93°C)</td>
<td>N/A</td>
<td>No. 83 Thinner at 10% to 25%</td>
</tr>
<tr>
<td>300°F (149°C)</td>
<td>N/A</td>
<td>No. 83 Thinner at 15% to 30%</td>
</tr>
<tr>
<td>400°F (204°C)</td>
<td>N/A</td>
<td>No. 83 Thinner at 20% to 35%</td>
</tr>
<tr>
<td>500°F (260°C)</td>
<td>N/A</td>
<td>No. 83 Thinner at 25% to 40%</td>
</tr>
</tbody>
</table>

**Note:** For standard applications, thin 5% to 10% with No. 82 thinner.

### 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, 45:1, 60:1</td>
<td>0.011&quot;-0.015&quot; (279-330 microns)</td>
<td>1800 Psi (124 bar)</td>
<td>3/8&quot; (9.5 mm)</td>
</tr>
</tbody>
</table>

#### Roller

Recommended for small areas only. Use 1/4" or 3/8" (6.3 mm to 9.5 mm) high quality synthetic woven nap covers.

#### Brush

Recommended for small areas only. Use high quality natural bristle brushes.

### Surface Temperature

Minimum 43°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.

### Caution

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

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