TNEMEC TOPCOAT
PRODUCT DATA SHEET
SERIES 1040

PRODUCT PROFILE

GENERIC DESCRIPTION
Silane Hybrid Waterbase Acrylic

COMMON USAGE
A next generation waterbase topcoat featuring excellent color and gloss durability in exterior weathering conditions. User-friendly for the applicator, this ultra-low VOC, isocyanate-free formulation features an advanced 3 stage polymeric curing chemistry that forms a hard, durable film for structural steel, tank exteriors, decorative metals, and industrial equipment. Dry-fall spray characteristics provide fast, labor-saving coating application and help to reduce the potential for overspray problems on buildings and surrounding property.

COLORS
Refer to Tnemec Color Guide.

FINISH
Semi-gloss

COATING SYSTEM

PRIMERS
Steel: Series 27WB, 2E13
Topcoats: Series 1040

SURFACE PREPARATION

PRIMED SURFACES
Must be clean, dry and free of dust, dirt, oil, grease and other contaminants. Existing water soluble stains in the substrate or upon the surface must be removed or sealed.

TECHNICAL DATA

VOLUME SOLIDS
41 ± 2.0% (mixed)

RECOMMENDED DFT
2.0 to 4.0 mils (51 to 102 microns) per coat.

CURING TIME

<table>
<thead>
<tr>
<th>Temperature</th>
<th>To Touch</th>
<th>To Handle</th>
<th>To Recoat</th>
</tr>
</thead>
<tbody>
<tr>
<td>75°F (24°C)</td>
<td>30 to 45 minutes</td>
<td>2 to 3 hours</td>
<td>1 to 2 hours</td>
</tr>
</tbody>
</table>

Curing time varies with surface temperature, air movement, humidity and film thickness.

VOLATILE ORGANIC COMPOUNDS
EPA Method 24:
Unthinned: 1.25 lbs/gal (149.9 grams/litre)
Thinned 5% (Water): 1.25 lbs/gal (149.9 grams/litre)

GB/T 25986.2009:
Unthinned: 0.44 lbs/gal (53 grams/litre)
Thinned 5% (Water): 0.44 lbs/gal (53 grams/litre)

HAPS
Unthinned: 1.10 lbs/gal solids
Thinned 5% (Water): 1.10 lbs/gal solids

NUMBER OF COMPONENTS
Two

MIXING RATIO
By volume: Thirty one Part A (310 mL) to one Part B (10 mL).

PACKAGING

<table>
<thead>
<tr>
<th>LARGE KIT</th>
<th>SMALL KIT</th>
<th>TOUCH-UP KIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 gallon pail</td>
<td>1 gallon can</td>
<td>quart can</td>
</tr>
<tr>
<td>1 quart jug</td>
<td>8 oz bottle</td>
<td>4 oz bottle</td>
</tr>
<tr>
<td>5 gallons (18.9 L)</td>
<td>1 gallon (3.79 L)</td>
<td>1 quart (0.95 L)</td>
</tr>
</tbody>
</table>

NET WEIGHT PER GALLON
10.54 ± 0.25 lbs (4.78 ± 1.1 kg)

STORAGE TEMPERATURE
Minimum 35°F (2°C) Maximum 120°F (49°C)

TEMPERATURE RESISTANCE
(Dry) Continuous 170°F (77°C) Intermittent 200°F (93°C)

SHELF LIFE
Part A: 9 months, Part B: 9 months at recommended storage temperature.

FLASH POINT - SETA
Part A: >250°F (110°C) Part B: >250°F (110°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>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>3.0 (76)</td>
<td>7.0 (178)</td>
<td>219 (20.4)</td>
</tr>
<tr>
<td>Minimum</td>
<td>2.0 (51)</td>
<td>5.0 (127)</td>
<td>529 (30.5)</td>
</tr>
<tr>
<td>Maximum</td>
<td>4.0 (102)</td>
<td>10.0 (254)</td>
<td>164 (15.5)</td>
</tr>
</tbody>
</table>

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 thickness may adversely affect coating performance.
**MIXING**

Always use the entire contents of A and B components. Stir contents of Part A, making sure no pigment remains on the bottom. Slowly add the contents of Part B to Part A while under agitation. Continue agitation until thoroughly mixed. If not using a full kit, add 10 mL of Part B to 310 mL of Part A.

**THINNING**

Normally not required. For air spray or airless spray, can be thinned up to 5% (16 mL) with clean water.

**POT LIFE**

90°F (32°C) to 50°F (10°C): 7 hours

**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>704 or 765</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>60-70 psig</td>
<td>1-4.8 bar</td>
</tr>
</tbody>
</table>

†Stainless Steel
Low temperatures or longer hoses require higher pot pressure.

### 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>0.013”-0.017” (330-430 microns)</td>
<td>2200-3000 psi (152-207 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.

**SURFACE TEMPERATURE**

Minimum 40°F (4°C) Maximum 120°F (49°C)
The surface should be dry and at least 5°F (3°C) above the dew point.

**CLEANUP**

Flush and clean all equipment immediately after use with water, then use alcohol or Methyl Ethyl Ketone (MEK) on any dried portions.

**CAUTION**

Dry overspray can be wiped or washed from most surfaces. Satisfactory dry-fall performance depends upon height of work, weather conditions and equipment adjustment. Low temperature and high humidity are of particular concern. Test for each application as follows: Spray from 15 to 25 feet towards paint container. The material then should readily wipe off. **Note:** Heat can fuse-dry overspray to surfaces. Always clean dry overspray from hot surfaces before fusing occurs. Be aware that exterior surface temperatures can be higher than air temperature.

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