PRODUCT PROFILE

GENERIC DESCRIPTION
Waterborne Acrylic Polyurethane

COMMON USAGE
A waterborne polyurethane coating that provides excellent abrasion resistance and color and gloss retention for applications to steel, concrete and other miscellaneous substrates. It features low VOC content, low odor, semi-gloss finish and easy cleanup.

COLORS
Refer to Tnemec Color Guide. Note: Certain colors may require multiple coats depending on method of application and finish coat color. When feasible, the preceding coat should be in the same color family, but noticeably different.

FINISH
Semi-Gloss - Note: Final gloss level of topcoat can vary depending on number of coats applied. One coat will generally result in a lower sheen than two coats of the material.

SPECIAL QUALIFICATIONS
Series 1081 was tested in accordance with, and passed, the California Department of Public Health CDPH/EHLR/Standard Method Version 1.1, 2010 emissions testing and meets qualifications of LEED v4, Collaborative for High Performance Schools, and Living Building Challenge.

COATING SYSTEM

PRIMERS
Galvanized Steel and Non-Ferrous Metal: Series 60, L69, N69, V69, 115, 135, 1224. Note: For special galvanized surface preparation instructions, consult the latest version of Tnemec Technical Bulletin 10-78.
CMU: L69, L69F, N69, N69F, V69, V69F, 130, 287, 1254
Note: Intermediate coat required (any of the above primers for concrete). Note: Epoxy primers exterior exposed for more than 30 days require an epoxy intermediate coat or scarification prior to topcoating with Series 1081. A minimum recoat of 24 hours at 75°F (24°C) applies when using Series 27WB. Reference the Series 27WB product data sheet for additional cure information. More than one finish coat of Series 1081 is required when used over Series 27WB to achieve uniform and desired gloss level.

INTERMEDIATE TOPCOATS
Series 113, 114, 115, 280, 287, 1028, 1029

SURFACE PREPARATION

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

TECHNICAL DATA

VOLUME SOLIDS
61.0 ± 2.0% (mixed) †

RECOMMENDED DFT
2.0 to 3.0 mls (50 to 75 microns) per coat. Note: Number of coats and thickness requirements will vary with substrate, application method, and exposure. Caution: Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating aesthetics and performance. Excessive film thicknesses will cause microbubbling. Contact your Tnemec representative.

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>45 minutes</td>
<td>6 hours</td>
<td>6 hours</td>
</tr>
</tbody>
</table>

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

VOLATILE ORGANIC COMPOUNDS
Unthinned: 0.75 lbs/gallon (88 grams/litre)
Thinned 5% (Water): 0.75 lbs/gallon (88 grams/litre)
Thinned 5% (No. 66 Thinner): 1.25 lbs/gallon (147 grams/litre) †

HAPS
Unthinned: 0 lbs/gal solids
Thinned 5% (Water): 0 lbs/gal solids
Thinned 5% (No. 66 Thinner): 0 lbs/gal solids

THEORETICAL COVERAGE
978 mil sq ft/gal (24.0 m²/L at 25 microns). See APPLICATION for coverage rates. †

NUMBER OF COMPONENTS
Two: Part A and Part B

MIXING RATIO
By volume: Four (Part A) to one (Part B)

PACKAGING

<table>
<thead>
<tr>
<th></th>
<th>PART A (Partially filled)</th>
<th>PART B (Partially filled)</th>
<th>When Mixed Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Kit</td>
<td>5 gallon pail</td>
<td>1 gallon can</td>
<td>3 gallons (11.4L)</td>
</tr>
<tr>
<td>Small Kit</td>
<td>1 gallon can</td>
<td>1 quart can</td>
<td>1 gallon (3.79L)</td>
</tr>
</tbody>
</table>

NET WEIGHT PER GALLON
12.35 ± 0.25 lbs (5.60 ± .11 kg) †

STORAGE TEMPERATURE
Minimum 40°F (4°C) Maximum 110°F (43°C)

Protect from freezing.

TEMPERATURE RESISTANCE
(Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)

12 months at recommended storage temperature.

SHELF LIFE
Part A: 125°F (52°C) Part B: >200°F (93°C)

FLASH POINT - SETA
Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Material 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>Suggested</td>
<td>2.5 (65)</td>
<td>4.0 (100)</td>
<td>391 (36.3)</td>
</tr>
<tr>
<td>Minimum</td>
<td>2.0 (50)</td>
<td>3.5 (90)</td>
<td>489 (45.4)</td>
</tr>
<tr>
<td>Maximum</td>
<td>3.0 (75)</td>
<td>5.0 (125)</td>
<td>326 (30.3)</td>
</tr>
</tbody>
</table>

**Note:** Coverage rates based on unthinned material. Allow for overspray and surface irregularities. 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 aesthetics and performance. †

#### MIXING

Stir contents of the container marked Part A, making sure no pigment remains on the bottom. Add the contents of the container marked Part B to Part A while under mechanical agitation. Continue agitation until the two components are thoroughly mixed. Continue mechanical agitation and then according to the thinning instructions. Do not use mixed material beyond pot life limits.

**Caution:** Part B is moisture-sensitive and will react with atmospheric moisture. Keep unused material tightly closed at all times. Do not reseal mixed material. An explosion hazard may be created. Unused mixed material should be thinned with equal amounts of water by volume and disposed of properly.

**Important:** Thin with mechanical agitation only after Part B has been thoroughly mixed with Part A according to mixing instructions.

#### THINKING

Thinning is required for proper application. Thin up to 15% by volume with clean water. For warm temperature applications, product can be thinned with a combination of 5% No. 66 Thinner and 10% water.

**Important:** Thin with mechanical agitation only after Part B has been thoroughly mixed with Part A according to mixing instructions.

#### POT LIFE

2 hours at 77°F (25°C)

#### APPLICATION EQUIPMENT

<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&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>50-80 psi (3.4-5.5 bar)</td>
<td>10-20 psi (0.7-1.4 bar)</td>
</tr>
</tbody>
</table>

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>0.015&quot; -0.017&quot; (550-430 microns)</td>
<td>3000-4000 psi (207-275 bar)</td>
<td>1/4&quot; or 3/8&quot; (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.

**Roller:** Use 1/4" (preferred) or 3/8" (6.4 mm to 9.5 mm) synthetic woven nap roller covers. Do not use medium or long nap roller covers. Two coats are required to obtain dry film thickness above 3.0 mils (75 microns).

**Brush:** Recommended for small areas only. Use high quality natural or synthetic bristle brushes. Two coats are required to obtain recommended film thickness.

#### APPLICATION CONDITIONS

- **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. **Caution:** Protect from high humidity, dew and direct moisture contact during application and curing. Application and/or curing in humidities above maximum, or exposure to moisture from rain or dew may result in a loss of gloss and/or microbubbling of the product.

**Flush and clean all equipment immediately after use with water and flush with xylene.**

† Values may vary with color.