



# TNEMEC TOPCOAT 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**

Temperature	To Touch	To Handle	To Recoat
75°F (24°C)	30 to 45 minutes	2 to 3 hours	1 to 2 hours

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 23986.2009:  
**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

	Part A (partially filled)	Part B (partially filled)	Yield
Large Kit	5 gallon pail	1 quart jug	5 gallons (18.9 L)
Small Kit	1 gallon can	8 oz bottle	1 gallon (3.79 L)
Touch-Up Kit	quart can	4 oz bottle	1 quart (0.95 L)

**NET WEIGHT PER GALLON** 10.54 ± 0.25 lbs (4.78 ± .11 kg)

**STORAGE TEMPERATURE** Minimum 35°F (2°C) Maximum 120°F (49°C)  
 PROTECT FROM FREEZING

**TEMPERATURE RESISTANCE** (Dry) Continuous 170°F (77°C) Intermittent 200°F (49°C)

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

**FLASH POINT - SETA** Part A: >230°F (110°C) Part B: >230°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

	Dry Mil (Microns)	Wet Mil (Microns)	Sq Ft/Gal (m <sup>2</sup> /Gal)
Suggested	3.0 (76)	7.0 (178)	219 (20.4)
Minimum	2.0 (51)	5.0 (127)	329 (30.5)
Maximum	4.0 (102)	10.0 (254)	164 (15.3)

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.

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**MIXING**  
**THINNING**  
**POT LIFE**  
**APPLICATION EQUIPMENT**

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.

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

90°F (32°C) to 50°F (10°C): 7 hours

**Air Spray**

Gun	Fluid Tip†	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbiss JGA	E	704 or 765	5/16" or 3/8" (7.9 or 9.5 mm)	3/8" or 1/2" (9.5 or 12.7 mm)	60-70 psi 4.1-4.8 bar	15-25 psi (1.0-1.4 bar)

†Stainless Steel

Low temperatures or longer hoses require higher pot pressure.

**Airless Spray**

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.013"-0.017" (330-430 microns)	2200-3000 psi (152-207 bar)	1/4" or 3/8" (6.4 or 9.5 mm)	60 mesh (250 microns)

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions.

**Roller:** Use 3/8" (9.5 mm) synthetic woven nap roller cover.

**Brush:** Use high quality nylon or synthetic bristle brushes.

**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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