



PRODUCT PROFILE

- GENERIC DESCRIPTION** Polyamide Epoxy
- COMMON USAGE** Versatile low-temperature coating ideally suited for steel fabrication and OEM applications. Also widely used as a field tie-coat. Provides fast curing and rapid handling capabilities. **Note:** Series 27 conforms with air pollution regulations limiting Volatile Organic Compounds (VOC) to a maximum of 340 grams/litre (2.8 lbs/gal).
- COLORS** Refer to Tnemec Color Guide. **Note:** Epoxies chalk with extended exposure to sunlight. Lack of ventilation, incomplete mixing, miscatalyzation or the use of heaters that emit carbon dioxide and carbon monoxide during application and initial stages of curing may cause yellowing to occur.
- FINISH** Flat
- PERFORMANCE CRITERIA** Extensive test data available. Contact your Tnemec representative for specific test results.

COATING SYSTEM

- PRIMERS** **Steel:** Self-priming or Series 1, 37H, 66, L69, L69F, N69, N69F, V69, V69F, 90, 94-H₂O, 135, 394, 530
Galvanized Steel and Non-Ferrous Metal: Self-priming, Series 66 or L69, L69F, N69, N69F, V69, V69F.
- TOPCOATS** Series 2H, 30, 66, 73, 113, 114, 115, 175, 700, V700, 701, V701, 1028, 1029, 1070, 1070V, 1071, 1071V, 1072, 1072V, 1074, 1075, 1077, 1078, 1078V. **Note:** Series 27 exterior exposed for 3 weeks or longer requires an epoxy intermediate coat or scarification prior to topcoating with Series 2H. When topcoating with Series 700, V700, 701, V701, 1070, 1070V, 1071, 1071V, 1072, 1072V, 1078, or 1078V over Series 27, a 14 day maximum recoat time applies. Refer to appropriate topcoat data sheet for additional information.

SURFACE PREPARATION

- STEEL** SSPC-SP6/NACE 3 Commercial Blast Cleaning
- GALVANIZED STEEL & NON-FERROUS METAL** Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services.
- OVERCOATING** For overcoat applications, reference Tnemec Technical Bulletin No. 98-10 and contact your Tnemec representative.
- ALL SURFACES** Must be clean, dry and free of oil, grease and other contaminants.

TECHNICAL DATA

- VOLUME SOLIDS** 58.0 ± 2.0% (mixed) †
- RECOMMENDED DFT** 2.0 to 6.0 mils (50 to 150 microns) per coat. **Note:** Number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative.

CURING TIME	Temperature	To Touch	To Handle	To Recoat
	75°F (24°C)	1/2 hour	2 hours	3 hours
	65°F (18°C)	3/4 hour	4 hours	5-6 hours
	55°F (11°C)	1 hour	4-5 hours	6-8 hours
	45°F (7°C)	1-2 hours	6-8 hours	9-12 hours
	35°F (2°C)	2-3 hours	9-12 hours	12-15 hours

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

- VOLATILE ORGANIC COMPOUNDS** **Unthinned:** 2.36 lbs/gallon (282 grams/litre)
Thinned 10% (No. 60 Thinner): 2.83 lbs/gallon (339 grams/litre)
Thinned 10% (No. 4 Thinner): 2.83 lbs/gallon (339 grams/litre) †

- HAPS** **Unthinned:** 2.59 lbs/gal solids
Thinned 10% (No. 60 Thinner): 2.59 lbs/gal solids
Thinned 10% (No. 4 Thinner): 3.54 lbs/gal solids

THEORETICAL COVERAGE 930 mil sq ft/gal (22.8 m²/L at 25 microns). See APPLICATION for coverage rates. †

NUMBER OF COMPONENTS Two: Part A and Part B

PACKAGING 5 gallon (18.9L) pails and 1 gallon (3.79L) cans — Order in multiples of 2.

NET WEIGHT PER GALLON 14.22 ± 0.25 lbs (6.45 ± .11 kg) (mixed) †

STORAGE TEMPERATURE Minimum 20°F (-7°C) Maximum 110°F (43°C)

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

SHELF LIFE 24 months at recommended storage temperature.

FLASH POINT - SETA Part A: 82°F (28°C) Part B: 80°F (27°C)

HEALTH & SAFETY 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.

F.C. TYPOXY® | SERIES 27

APPLICATION

COVERAGE RATES

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m ² /Gal)
Suggested (1)	4.0 (100)	7.0 (180)	233 (21.6)
Minimum	2.0 (50)	3.5 (90)	465 (43.2)
Maximum	6.0 (150)	10.5 (265)	155 (14.4)

(1) Note: Roller or brush application requires two or more coats to obtain recommended film thickness. 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 thicknesses may adversely affect coating performance. †

MIXING

Power mix contents of each container, making sure no pigment remains on the bottom. Pour a measured amount of Part B into a clean container large enough to hold both components. Add an equal volume of Part A to Part B while under agitation. Continue agitation until the two components are thoroughly mixed. Do not use mixed material beyond pot life limits. **Note:** Both components should be above 50°F (10°C) prior to mixing. For applications to surfaces between 35°F to 50°F (2°C to 10°C), allow mixed material to stand thirty (30) minutes and restir before using. For optimum application properties, the material temperature should be above 60°F (16°C).

THINNING

Use No. 60 or No. 4 Thinner. For air spray, thin up to 10% or 3/4 pint (380 mL) per gallon. For airless spray, brush or roller, thin up to 5% or 1/4 pint (190 mL) per gallon.

POT LIFE

16 hours at 35°F (2°C) 2 hours at 77°F (25°C) 1/2 hour at 100°F (38°C)

APPLICATION EQUIPMENT

Air Spray

Gun	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbiss JGA	E	765 or 704	5/16" or 3/8" (7.9 or 9.5 mm)	3/8" or 1/2" (9.5 or 12.7 mm)	75-100 psi (5.2-6.9 bar)	25-35 psi (1.7-2.4 bar)

Low temperatures or longer hoses require higher pot pressure.

Airless Spray

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.015"-0.019" (380-485 microns)	4000-4800 psi (276-331 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.

Note: Application over inorganic zinc-rich primers: Apply a wet mist coat and allow tiny bubbles to form. When bubbles disappear in 1 to 2 minutes, apply a full wet coat at specified mil thickness.

Roller: Roller application optional when environmental restrictions do not allow spraying. Use 3/8" or 1/2" (9.5 mm to 12.7 mm) synthetic woven nap covers.

Brush: Recommended for small areas only. Use high quality natural or synthetic bristle brushes.

SURFACE TEMPERATURE

Minimum 35°F (2°C) Maximum 135°F (57°C)

The surface should be dry and at least 5°F (3°C) above the dew point. Coating won't cure below minimum surface temperature.

CLEANUP

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

†Values may vary with color.

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