(Factory Accelerated) Hi-Build Epoxoline II SERIES N69F

Series V69F conforms with air pollution regulations limiting Volatile Organic Compounds (VOC) to a maximum of 250 grams/litre (2.08 lbs/gal)

PRODUCT PROFILE

GENERIC DESCRIPTION	Polyamidoamine Epoxy
COMMON USAGE	An advanced generation epoxy for the protection and finishing of steel and concrete. It has excellent resistance to abrasion and is suitable for immersion as well as chemical contact exposure. Contact your local Tnemec representative for a list of chemicals.
COLORS	Limited color availability. Contact your Tnemec representative.
FINISH	Satin

COATING SYSTEM

PRIMERS	**Steel:** Self-priming or Series 1, 66, N69, 90, 91-H_20, 135, 161, 594 **Galvanized Steel and Non-Ferrous Metal:** Self-priming or Series 66, 161 **Concrete:** Self-priming or Series 130, 218, 219 **CMU:** Self-priming or Series 130, 216, 218, 219
TOPCOATS	46H-413, 66, N69, 73, 104, 113, 114, 161, 175, 1070, 1071, 1072, 1074, 1075, 1078. Refer to COLORS on applicable topcoat data sheets for additional information. **Note:** When topcoating with Endura-Shield polyurethane finish, exterior exposed Series N69F has the following maximum time to recoat: Series 175, 1074 or 1075, 60 days; Series 73, 90 days. If these times are exceeded an epoxy intermediate coat or scarification is required before topcoating. Refer to appropriate topcoat data sheet for additional information.

SURFACE PREPARATION

STEEL	**Immersion Service:** SSPC-SP10 Near-White Blast Cleaning **Non-Immersion Service:** SSPC-SP6 Commercial Blast Cleaning
PRIMED STEEL	**Immersion Service:** Scarify the surface before topcoating if the Series 66 or 161 prime coat has been exterior exposed for 60 days or longer or if the Series N69F prime coat has been exposed for 90 days or longer.
GALVANIZED STEEL & NON-FERROUS METAL	Surface preparation recommendations will vary depending on substrate and exposure conditions. Contact your Tnemec representative or Tnemec Technical Services.
CAST/DUCTILE IRON	Contact your Tnemec representative or Tnemec Technical Services.
CONCRETE	Allow new concrete to cure for 28 days. For optimum results and/or immersion service, abrasive blast referencing SSPC-SP13/NACE 6 Surface Preparation of Concrete and Tnemec's Surface Preparation and Application Guide.
CMU	Allow mortar to cure for 28 days. Level protrusions and mortar spatter.
PAINTED SURFACES	**Non-Immersion Service:** Ask your Tnemec representative for specific recommendations.
ALL SURFACES	Must be clean, dry and free of oil, grease, chalk and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS*	69.0 ± 2.0% (mixed)
RECOMMENDED DFT	2.0 to 10.0 mils (50 to 255 microns) per coat. **Note: The number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative.**

CURING TIME

Temperature	To Handle	To Recoat	Immersion
75°F (24°C)	4 hours	5 hours	7 days
65°F (18°C)	7-8 hours	9-11 hours	8 days
55°F (13°C)	12-14 hours	16-20 hours	9-10 days
45°F (7°C)	18-22 hours	28-32 hours	12-13 days
35°F (2°C)	28-32 hours	46-50 hours	16-18 days

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

VOLATILE ORGANIC COMPOUNDS*

N69F: Unthinned	Thinned 10%	V69F: Unthinned	Thinned 3.5%
2.33 lbs/gallon (279 grams/litre)	2.75 lbs/gallon (329 grams/litre)	1.90 lbs/gallon (228 grams/litre)	2.08 lbs/gallon (250 grams/litre)

THEORETICAL COVERAGE*	1,107 mil sq ft/gal (27.2 m^2/L at 25 microns). See APPLICATION for coverage rates.
NUMBER OF COMPONENTS	Two: Part A and Part B
PACKAGING	5 gallon (18.9L) pails — Order in multiples of 2.
NET WEIGHT PER GALLON*	N69F: 13.45 ± 0.25 lbs (6.10 ± .11 kg) (mixed) V69F: 13.90 ± 0.25 lbs (6.31 ± .11 kg) (mixed)
STORAGE TEMPERATURE	Minimum 20°F (-7°C) Maximum 110°F (43°C)

TECHNICAL DATA continued

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

SHELF LIFE: Part A: 24 months; Part B: 12 months at recommended storage temperature.

FLASH POINT - SETA: N69F & V69F Part A: 82°F (28°C) N69F Part B: 80°F (26°C) V69F Part B: 86°F (30°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.**

APPLICATION

COVERAGE RATES*

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m^2/Gal)
Suggested (1)	4.0 (100)	6.0 (150)	277 (25.7)
Minimum	2.0 (50)	3.0 (75)	554 (51.4)
Maximum	6.0 (150)	8.5 (215)	184 (17.1)

(1) Note: Roller or brush application requires two or more coats to obtain recommended film thickness. Also, Series N69F can be spray applied to an optional high-build film thickness range of 8.0 to 10.0 dry mils (205 to 255 dry microns) or 11.5 to 14.5 wet mils (209 to 370 wet microns). 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 performance.

MIXING

1. Start with equal amounts of both Parts A & B.
2. Using a power mixer, separately stir Parts A & B.
3. Add Part A to Part B under agitation, stir until thoroughly mixed.
4. Both components should be above 50°F (10°C) prior to mixing. For application 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, blended components should be above 60°F (16°C).

POT LIFE: 8 hours at 35°F (2°C) 4 hours at 77°F (25°C) 1 hour at 100°F (38°C)

THINNING: **For N69F:** Use No. 4 Thinner. For air spray, thin up to 10% or ¾ pint (380 mL) per gallon. For airless spray, roller or brush thin up to 5% or ¼ pint (190 mL) per gallon. **Note:** When using Series V69F, a maximum of 3.5% of No. 4 Thinner may be used to comply with VOC regulations.

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 will not cure below minimum surface temperature.

APPLICATION EQUIPMENT

Air Spray †

Gun	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbiss MBC or JGA	E	765 or 78	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)	10-20 psi (0.7-1.4 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)	1800-3000 psi (124-207 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.

† Spray application of first coat on CMU should be followed by backrolling.

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: Use 3/8" or 1/2" (9.5 mm or 12.7 mm) synthetic nap covers.

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

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

*Values may vary with color.