



HI-BUILD EPOXOLINE II N69 or V69

PRODUCT PROFILE

GENERIC DESCRIPTION	Polyamidoamine Epoxy
COMMON USAGE	An advanced generation epoxy for 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. This product can also be used for lining storage tanks that contain demineralized, deionized or distilled water. Note: Series V69 conforms with air pollution regulations limiting Volatile Organic Compounds (VOC) to a maximum of 250 grams/litre (2.08 lbs/gal) in areas requiring less than 100 grams/litre VOC, please refer to the Series L69 data sheet.
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	Satin
SPECIAL QUALIFICATIONS	A two-coat system at 4.0-6.0 dry mills (100-150 dry microns) per coat passes the performance requirements of MIL-PRF-4556F for fuel storage.
PERFORMANCE CRITERIA	Extensive test data available. Contact your Tnemec representative for specific test results.

COATING SYSTEM

PRIMERS	Steel: Self-priming or Series 1, 27, 37H, 66, 90E-92, 90-97, 90-1K97, 91-H ₂ O, 94-H ₂ O, 135, 161, 394, 530 Galvanized Steel and Non-Ferrous Metal: Self-priming or Series 66, 161 Concrete: Self-priming or Series 130, 218 CMU: Self-priming or 54-562, 130, 215, 216, 218
TOPCOATS	46H-413, 66, L69, N69, 73, 84, 104, 113, 114, 161, 1028, 1029, 1070, 1071, 1072, 1074, 1074U, 1075, 1075U, 1077, 1078. Refer to COLORS on applicable topcoat data sheets for additional information. Note: The following recoat times apply for Series N69/V69: Immersion Service—Surface must be scarified after 60 days. Atmospheric Service—After 60 days, scarification or an epoxy tie-coat is required. Contact your Tnemec representative for specific recommendations.

SURFACE PREPARATION

PRIMED STEEL	Immersion Service: Scarify the Series 66, N69/V69 or 161 prime coat surface by abrasive blasting with fine abrasive before topcoating if it has been exterior exposed for 60 days or longer and N69/V69 is the specified topcoat.
STEEL	Immersion Service: SSPC-SP10/NACE 2 Near-White Blast Cleaning Non-Immersion Service: 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.
CAST/DUCTILE IRON	Contact your Tnemec representative or Tnemec Technical Services.
CONCRETE	Allow new concrete to cure 28 days. For optimum results and/or immersion service, abrasive blast referencing SSPC-SP13/NACE 6, ICRI CSP 2-4 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	67.0 ± 2.0% (mixed) †
RECOMMENDED DFT	2.0 to 10.0 mils (50 to 255 microns) per coat. Note: MIL-PRF-4556F applications require two coats at 4.0-6.0 mils (100-150 microns) per coat. Otherwise, the number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative.
CURING TIME AT 5 MILS DFT	Without 44-700 Accelerator

Temperature	To Handle	To Recoat	Immersion
90°F (32°C)	4 hours	7 hours	6 days
80°F (27°C)	5 hours	8 hours	7 days
70°F (21°C)	7 hours	10 hours	7 days
60°F (16°C)	8 hours	12 hours	9 days
50°F (10°C)	12 hours	16 hours	12 days

Curing time varies with surface temperature, air movement, humidity and film thickness. **Note:** For faster curing and low-temperature applications, add No. 44-700 Epoxy Accelerator; see separate product data sheet.

VOLATILE ORGANIC COMPOUNDS	N69 - Unthinned: 2.40 lbs/gallon (285 grams/litre) Thinned 10% (No. 4 Thinner): 2.80 lbs/gallon (334 grams/litre) Thinned 10% (No. 60 Thinner): 2.80 lbs/gallon (335 grams/litre) V69 - Unthinned: 1.95 lbs/gallon (234 grams/litre) Thinned 2.5%: 2.08 lbs/gallon (250 grams/litre) †
HAPS	N69 - Unthinned: 2.40 lbs/gal solids Thinned 10% (No. 4 Thinner): 3.25 lbs/gal solids Thinned 10% (No. 60 Thinner): 2.40 lbs/gal solids V69 - Unthinned: 2.05 lbs/gal solids Thinned 2.5%: 2.30 lbs/gal solids)
THEORETICAL COVERAGE	1,074 mil sq ft/gal (26.4 m ² /L at 25 microns). See APPLICATION for coverage rates. †