



# HI-BUILD EPOXOLINE® SERIES 66

## PRODUCT PROFILE

<b>GENERIC DESCRIPTION</b>	Polyamide Epoxy
<b>COMMON USAGE</b>	Industry standard for epoxy coatings for over 40 years. Known for its forgiving application characteristics in adverse and varied conditions, and for benchmark performance.
<b>COLORS</b>	Refer to Tnemec Color Guide. <b>Note:</b> Epoxies chalk with extended exposure to sunlight and may yellow on aging. 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 accelerate any potential yellowing.
<b>FINISH</b>	Satin

## COATING SYSTEM

<b>SURFACER/FILLER/PATCHER</b>	Series 215, 217, 218
<b>PRIMERS</b>	<p><b>Steel:</b> Self-priming or Series 1, 20, FC20, 37H, L69, L69F, N69, N69F, V69, V69F, 90G-1K97, 90E-92, 90-97, H90-97, 90-98, 91-H<sub>2</sub>O, 94-H<sub>2</sub>O, 161, 394, V530</p> <p><b>Galvanized Steel and Non-Ferrous Metal:</b> Self-priming</p> <p><b>Concrete:</b> Self-priming, Series 27WB, 201, 1254</p> <p><b>CMU:</b> Series 130, 1254</p> <p><b>Drywall:</b> 151-1051 for dry interior environments</p> <p><b>Note:</b> A maximum recoat time may apply depending on the topcoat specified. Refer to the applicable topcoat product sheet for information on product specific maximum recoat times.</p>
<b>TOPCOATS</b>	Series 27WB, 30, 46H-413, 66, L69, L69F, N69, N69F, V69, V69F, 72, 73, 104, 113, 114, 118, 161, 262, 265, 290, 291, 740, 750, 1026, 1028, 1029, 1070, 1070V, 1071, 1071V, 1072, 1072V, 1074, 1074U, 1075, 1075U, 1077, 1078, 1078V, 1094, 1095, 1096, 1224. <b>Note:</b> A maximum recoat time may apply depending on the topcoat specified. Refer to the applicable topcoat product sheet for information on product specific maximum recoat times.

## SURFACE PREPARATION

<b>STEEL</b>	<p><b>Immersion Service:</b> SSPC-SP10/NACE 2 Near-White Blast Cleaning or ISO Sa 2 1/2 Very Thorough Blast Cleaning with a minimum angular anchor profile of 1.5 mils.</p> <p><b>Non-Immersion Service:</b> SSPC-SP6/NACE 3 Commercial Blast Cleaning or ISO Sa 2 Thorough Blast Cleaning with a minimum angular anchor profile of 1.5 mils. <b>Note:</b> Commercial Blast Cleaning generally produces the best coating performance for this exposure. If conditions will not permit this, in moderate exposures Series 66 may be applied to SSPC-SP2 or SP3 Hand or Power Tool Cleaned surfaces (SSPC Rust Grade Condition C).</p>
<b>GALVANIZED STEEL &amp; NON-FERROUS METAL</b>	Surface preparation recommendations will vary depending on substrate and exposure conditions. Consult the latest version of Tnemec Technical Bulletin 10-78 or contact your Tnemec representative or Tnemec Technical Services.
<b>CAST/DUCTILE IRON</b>	All external surfaces of ductile iron pipe and fittings shall be delivered to the application facility without asphalt or any other protective lining on the exterior surface. All oils, small deposits of asphalt paint, grease, and soluble deposits should be removed and uniformly abrasive blasted using angular abrasive in accordance with NAPF 500-03-04: External Pipe Surface condition. When viewed without magnification, the exterior surfaces shall be free of all visible dirt, dust, loose annealing oxide, rust, mold coating and other foreign matter. Any area where rust reappears before application shall be reblasted. The surface shall contain a minimum angular anchor profile of 1.5 mils (38.1 microns) (Reference NACE RP0287 or ASTM D 4417, Method C).
<b>CONCRETE</b>	Allow new cast-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Verify concrete dryness in accordance with ASTM F 1869 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride" (moisture vapor transmission should not exceed three pounds per 1,000 square feet in a 24 hour period), F 2170 "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes" (relative humidity should not exceed 80%), or D 4263 "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method" (no moisture present). Prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide an ICRI-CSP 2-3 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.
<b>CMU</b>	Allow mortar to cure for 28 days. Prepare in accordance with SSPC-SP13/NACE 6 to level protrusions and mortar spatter, and remove other contaminants.
<b>PAINTED SURFACES</b>	<b>Non-Immersion Service:</b> Ask your Tnemec representative for specific recommendations.
<b>PRIMED SURFACES</b>	<b>Immersion Service:</b> Scarify the Series 66 prime coat surface by abrasive-blasting with a fine abrasive before topcoating if: (a) the Series 66 prime coat has been in exterior exposure for 60 days or longer and Series 66, 46H-413, L69, L69F, N69, N69F, V69, V69F or 161 is the specified topcoat; (b) the Series 66 prime coat has been in exterior exposure for 14 days or longer and Series 104 is the specified topcoat; (c) the Series 66 prime coat has been in exterior exposure for 7 days or longer and Series 262 or 265 is the specified topcoat.
<b>ALL SURFACES</b>	Must be clean, dry and free of oil, grease and other contaminants.

## TECHNICAL DATA

<b>VOLUME SOLIDS</b>	56.0 ± 2.0% (mixed) †
<b>RECOMMENDED DFT</b>	2.0 to 6.0 mils (50 to 150 microns) per coat. <b>Note:</b> Number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative.

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CURING TIME	Temperature	To Touch	To Handle	To Recoat	Immersion
	90°F (32°C)	1 hours	5-7 hours	6-8 hours	4-5 days
	80°F (27°C)	1.5 hours	7-9 hours	8-10 hours	6-7 days
	70°F (21°C)	2 hours	10-12 hours	12-14 hours	7-10 days
	60°F (16°C)	3 hours	16-20 hours	20-24 hours	10-12 days
	50°F (10°C)	4 hours	24-30 hours	30-36 hours	14-16 days

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

**Ventilation:** When used as a tank lining or in enclosed areas, provide adequate ventilation during application and cure. Reference guidelines contained in the latest edition of AWWA D 102.

**VOLATILE ORGANIC COMPOUNDS**

**Unthinned:** 3.02 lbs/gallon (362 grams/litre)  
**Thinned 5%:** 3.20 lbs/gallon (384 grams/litre)  
**Thinned 10%:** 3.37 lbs/gallon (404 grams/litre) †

**THEORETICAL COVERAGE**

898 mil sq ft/gal (22.0 m<sup>2</sup>/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**

12.50 ± 0.25 lbs (5.67 ± .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**

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

**FLASH POINT - SETA**

Part A: 82°F (28°C) Part B: 64°F (18°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 <sup>2</sup> /Gal)
Suggested	4.0 (100)	7.0 (180)	225 (20.9)
Minimum	2.0 (50)	3.5 (90)	450 (41.8)
Maximum	6.0 (150)	10.5 (265)	150 (13.9)

**Note:** Roller or brush application may require 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 application to surfaces between 50°F to 60°F (10°C to 16°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). Mixing ratio is one to one by volume.

**THINNING**

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

**POT LIFE**

20 hours at 50°F (10°C) 10 hours at 77°F (25°C) 4 hours 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)	50-80 psi (3.4-5.5 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)	3000-4000 psi (207-276 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 50°F (10°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.

**CLEANUP**

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

† Values may vary with color.

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