



TNEMEC-FASCURE SERIES 161HS

PRODUCT PROFILE

GENERIC DESCRIPTION	Polyamide Epoxy
COMMON USAGE	A high-solids, low VOC, pure polyamide epoxy offering excellent protection to a wide range of substrates in atmospheric and immersion environments. Its fast-cure characteristics are ideal for shop or low temperature application. Versatile use as a primer, intermediate, or topcoat it is complimented by a variety of finish coat options.
COLORS	Refer to Tnemec Color Guide. Note: 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. Note: Special color bases are recommended for immersion service. Contact your Tnemec representative for more information.
FINISH	Satin

COATING SYSTEM

SURFACER/FILLER/PATCHER	215, 217, 218
PRIMERS	Steel: Self-priming or Series 1, 20HS, FC20HS, 27, 27WB, 66HS, 90-97, 90-98, 90E-92, 90G-1K97, 91-H ₂ O, 94-H ₂ O, 135, 394, V530 Concrete: Self-priming, 20HS, FC20HS, 66HS CMU: 130, 1254
TOPCOATS	46H-413, 27WB, 30, 72, 73, 104, 113, 114, 115, 141, 161HS, 262, 265, 290, 291, 740, 750, 1026, 1028, 1029, 1070, 1070V, 1071, 1071V, 1072, 1072V, 1074, 1074U, 1075, 1075U, 1080, 1081, 1095. Refer to COLORS on applicable topcoat data sheets for additional information. Note: When topcoating Series 161HS, the following maximum recoat times apply: with 262 or 265, 7 days; with 740 or 750, 14 days; with 1095, 30 days; with itself, 46H-413, 27WB, 104, 113, 114, 290, 291, 1070, 1070V, 1071, 1071V, 1072, 1072V, 1080 or 1081, 60 days; with 72, 73, 1074, 1074U, 1075 or 1075U, 90 days. Scarify the Series 161HS surface before topcoating if maximum recoat time has elapsed.

SURFACE PREPARATION

PRIMED STEEL	Immersion Service: Scarify the epoxy prime coat surface by abrasive-blasting with a fine abrasive before topcoating if more than 60 days has elapsed since initial application.
STEEL	Immersion Service: 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. Non-Immersion Service: SSPC-SP6/NACE 3 Commercial Blast Cleaning or ISO Sa 2 Thorough Blast Cleaning with a minimum angular anchor profile of 1.5 mils. Note: Commercial Blast Cleaning generally produces the best coating performance for this exposure. If conditions will not permit this, in moderate exposures Series 161HS may be applied to SSPC-SP2 or SP3 Hand or Power Tool Cleaned surfaces (SSPC Rust Grade Condition C).
GALVANIZED STEEL & NON-FERROUS METAL	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.
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 Surface Preparation of Concrete and Tnemec's Surface Preparation and Application Guide.
CMU	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.
PAINTED SURFACES	Non-Immersion Service: Ask your Tnemec representative for specific recommendations.
ALL SURFACES	Must be clean, dry and free of oil, grease and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS	78% ± 2.0% (mixed) †
RECOMMENDED DFT	2.0 to 10.0 mils (50 to 254 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	Immersion†
75°F (24°C)	1 hour	6 hours	7-8 hours	5 days
65°F (18°C)	2 hours	6-8 hours	8-10 hours	7 days
55°F (13°C)	3 hours	10-12 hours	14-16 hours	9 days
45°F (7°C)	5 hours	18-20 hours	22-24 hours	10 days
35°F (2°C)	6 hours	30 hours	36-40 hours	16 days

† For water immersion only. Chemical storage will require additional cure time. 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.

VOLATILE ORGANIC COMPOUNDS

Unthinned: 1.53 lbs/gal (184 grams/litre)
Thinned 10% (No. 4 Thinner): 2.02 lbs/gallon (242 grams/litre)
Thinned 20% (No. 4 Thinner): 2.43 lbs/gallon (291 grams/litre) †

HAPS

Unthinned: 1.15 lbs/gal solids
Thinned 10% (No. 4 Thinner): 1.87 lbs/gal solids
Thinned 20% (No. 4 Thinner): 2.58 lbs/gal solids

THEORETICAL COVERAGE

1,248 mil sq ft/gal (30.7 m²/L at 25 microns). See APPLICATION for coverage rates. †

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NUMBER OF COMPONENTS

Two: Part A (epoxy) and Part B (polyamide)

MIXING RATIO

One (Part A) to one (Part B) by volume.

PACKAGING

	Part A	Part B	When Mixed Yield
Large Kit	6 gallon pail (partially filled)	5 gallon pail	10 gallons (37.9 L)
Small Kit	1 gallon can	1 gallon can	2 gallons (7.57 L)

NET WEIGHT PER GALLON

13.03 lbs ± 0.25 lbs (5.91 ± .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: 24 months at recommended storage temperature.

FLASH POINT - SETA

Part A: 80°F (29°C) Part B: 105°F (41°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 MILS (Microns)	Wet MILS (Microns)	Sq Ft/Gal (m ² /Gal)
Suggested	5.0 (125)	6.5 (163)	250 (23.2)
Minimum	2.0 (50)	2.5 (63)	625 (58.0)
Maximum	10.0 (254)	13.0 (330)	125 (11.6)

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:** For applications between 35°F to 50°F (2°C to 10°C), allow mixed material to stand thirty (30) minutes and restir before using. To avoid this induction time, both components should be above 50°F (10°C) prior to mixing. Mixing ratio is one to one by volume.

THINNING

For air, airless spray, roller or brush applications, thin up to 10% or 12.8 ounces (380 mL) per gallon with No. 4 Thinner. For a finer finish, thin up to 20% or 25.6 ounces (760 mL) per gallon with No. 4 Thinner.

POT LIFE & SPRAY LIFE

10% Thinning:

Temperature	Pot Life	Spray Life
75°F (24°C)	1.5 hours	75 minutes
55°F (13°C)	2 hours	1.5 hours

20% Thinning:

Temperature	Pot Life	Spray Life
75°F (24°C)	2.5 hours	1.5 hours
55°F (13°C)	3 hours	2 hours

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)	20-25 psi (1.4-1.7 bar)

Low temperatures or longer hoses require higher pot pressure.

Airless Spray

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.015"-0.021" (380-530 microns)	3000-4500 psi (207-310 bar)	3/8" or 1/2" (9.5 or 12.7 mm)	60 mesh (250 microns)

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

Note: A minimum pump size of 45:1 is required for proper airless spray application.

Roller: Use 3/8" or 1/2" (9.5 mm to 12.7 mm) high quality 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 will not cure below minimum surface temperature.

CLEANUP

Flush and clean all equipment immediately after use with No. 4 Thinner or MEK.

† Values may vary with color.

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