TNEMEC

PRODUCT DATA SHEET

EPOXOLINE SERIES 22

PRODUCT PROFILE

GENERIC DESCRIPTION Modified Polyamine Epoxy

COMMON USAGE An advanced generation, 100% solids, high-build epoxy for the protection of steel and concrete. It provides excellent resistance to abrasion and is suitable for immersion service. Specialized curing mechanism allows for faster cure response with airless spray application.

COLORS WH11 Off-White, 1218 Light Blue, 1255 Beige

FINISH Semi-Gloss

SPECIAL QUALIFICATIONS Series 22-WH11 Off-White, 22-1218 Light Blue and 22-1255 Beige are certified by **NSF International** in accordance with **ANSI/NSF Std. 61** and are qualified for use on tanks and reservoirs of five (5) gallons capacity or greater, pipes 1/2" in diameter or greater and valves 1/2" in diameter or greater.

COATING SYSTEM

SURFACER/FILLER/PATCHER Series 215, 217, 218

PRIMERS **Steel:** Self-priming, 66, L69, L69F, N69, N69F, V69, V69F, 90-97, H90-97, 90G-1K97, 91-H_2O, H91-H_2O, 94-H_2O, L140, L140F, N140, N140F, V140, V140F, 161

TOPCOATS Series 73, 740, 750, 1028, 1029, 1074, 1074U, 1075, 1075U, 1080, 1081. **Note:** Series 22 exterior (sunlight) exposed for longer than maximum recoat requires scarification by abrasive blasting prior to topcoating.

SURFACE PREPARATION

STEEL **Non-Immersion Service:** SSPC-SP6/NACE 3 Commercial Blast Cleaning with a minimum angular anchor profile of 1.5 mils for dry film thicknesses at 16.0 to 20.0 mils.
Immersion Service: SSPC-SP10/NACE 2 Near-White Blast Cleaning with a minimum angular anchor profile of 3.0 mils for dry film thicknesses at 20.0 mils or greater.
Enclosed, Protected & Mild Environments: Contact your Tnemec representative or Tnemec Technical Service.

CONCRETE Allow new cast-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Verify concrete dryness and prepare concrete surfaces in accordance with NACE 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Moisture vapor transmission should not exceed three lbs per 1,000 sq ft in a 24 hour period (reference ASTM F 1869 "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride"). Relative humidity should not exceed 80% (reference ASTM F 2170 "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes"). Abrasive blast, shot-blast, water jet or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 5 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.

ALL SURFACES Must be clean, dry and free of oil, grease, chalk and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS 100% (mixed) †

RECOMMENDED DFT 16 to 30 mils (405 to 762 microns) in one or two coats.

CURING TIME

Temperature	To Touch	Dry Through	Minimum to Recoat	Return to Service	Maximum to Recoat
95°F (35°C)	2 1/2 hours	5 1/2 hours	4 hours	5 days	7 days
75°F (24°C)	7 hours	18 hours	16 hours	5 days	7 days
50°F (10°C)	24 hours	27 hours	32 hours	7 days	7 days

Note: These times are based on 20.0 mil (500 micron) dry film thickness. Cure 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:** 0.10 lbs/gallon (12 grams/litre)
Thinned 5%: 0.44 lbs/gallon (52 grams/litre) †

HAPS **Unthinned:** 0.0 lbs/gal solids
Thinned 5%: 0.37 lbs/gal solids

THEORETICAL COVERAGE 1,604 mil sq ft/gal (39.4 m²/L at 25 microns). See APPLICATION for coverage rates. †

NUMBER OF COMPONENTS Two: Part A (polyamine) and Part B (epoxy)

MIXING RATIO By volume: One (Part A) to one (Part B).

PACKAGING

	PART A	PART B	When Mixed
Large Kit	5 gallon pail	5 gallon pail	10 gallons (37.85 L)
Medium Kit	6 gal. pail (partial fill)	3 gal. can (partial fill)	5 gallons (15.14 L)

Large kit offered for plural component application.

NET WEIGHT PER GALLON 12.70 ± 0.25 lbs (5.76 ± .11 kg) (mixed) †

STORAGE TEMPERATURE Minimum 20°F (-6°C) Maximum 110°F (43°C)

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

EPOXOLINE | SERIES 22

SHELF LIFE 12 months at recommended storage temperature.

FLASH POINT - SETA Part A and Part B: >200°F (97°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 (m²/Gal)
Minimum	16.0 (400)	16.0 (400)	100 (9.3)
Maximum	30.0 (762)	30.0 (762)	53 (5.0)

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 Mix the entire contents of Part A and Part B separately. Scrape all of the Part A and Part B into a suitable container by using a flexible spatula. Use a variable seed drill with a PS Jiffy blade and mix the blended components for a minimum of two minutes. Apply the mixed material within the spray or pot life limits after agitation. For optimum application characteristics, material temperature should be between 70°F (21°C) and 80°F (27°C). **Note:** A large volume of material will gel quickly if not applied or reduced in volume.
Caution: Do not reseal mixed material. An explosion hazard may be created.

THINNING May thin up to 5% or 6 fluid ounces per gallon with No. 2 Thinner. DO NOT thin in areas with strict extractable regulations.

POT LIFE 45 minutes at 75°F (24°C) and 5% thinning

SPRAY LIFE 25 minutes at 75°F (24°C) and 5% thinning

APPLICATION EQUIPMENT Airless Spray

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.019"-0.023" (483-585 microns)	5000-5500 psi (345-380 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: Remove all filters. Material needs to be gravity fed through a material hopper using a 56:1 pump or larger. Material will not feed through a suction tube.
Plural Component Application: Contact Tnemec Technical Service for detailed equipment requirements.
Brush: Recommended for small areas only. Use high quality natural or synthetic bristle brushes.
Roller: Application not recommended.

TEMPERATURE REQUIREMENT **Surface Temperature:** Minimum 50°F (13°C), maximum 130°F (54°C). The surface temperature should be at least 5°F (3°C) above the dew point. Coating will not cure below minimum surface temperature. To avoid outgassing, concrete temperature should be stable or in a descending temperature mode.

Material Temperature: Prior to application, the material temperature should be between 70°F and 80°F (21°C and 27°C). It is suggested the material be stored at these temperatures at least 48 hours prior to use. Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

HOLIDAY TESTING If required by the project specifications, holiday testing should be performed in accordance with NACE SP0188. Contact Tnemec Technical Service for voltage recommendations and curing parameters prior to testing.

CLEANUP Flush and clean all equipment immediately after use with Tnemec No. 4 Thinner. Use Tnemec No. 68 Thinner when needed to comply with VOC regulations.

† Values may vary with color.