TNEMEC

PRODUCT DATA SHEET

SURFACING EPOXY SERIES 215

PRODUCT PROFILE

GENERIC DESCRIPTION Modified Polyamine Epoxy

COMMON USAGE An advanced generation, 100% solids epoxy filler and surfacer for concrete or steel. Excellent material for surfacing, patching and filling voids and bugholes in concrete substrates. Generally topcoated with a variety of high performance epoxies and polyurethanes for use in mild to aggressive exposures.

COLORS 1200 White, 1212 Gray

FINISH Semi-Gloss

SPECIAL QUALIFICATIONS Certified by **NSF International** in accordance with **NSF/ANSI Std. 61.** Ambient air cured Series 215 is qualified for use on the interior of potable water storage tanks and reservoirs of 200 gallons (757 L) capacity or greater at 80 mils DFT or 95 mils DFT with fiberglass mat (Fiberglass Mat Product No. S211-0215). Return to immersion time is seven days. Contact your Tnemec representative for approved systems and additional information on potential uses.

COATING SYSTEM

SURFACER/FILLER/PATCHER Self-patching or Series 217, 218

PRIMERS **Steel:** Self-priming, Series 1, 20, FC20, 22, 27WB, 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, 201, 394
Concrete: Self-priming, Series 20, FC20, 22, 27WB, 66, L69, L69F, N69, N69F, V69, V69F, L140, L140F, N140, N140F, V140, V140F, 161, 201. **Note:** Primers may be necessary on some applications to minimize or eliminate the potential for outgassing. **Note:** For potable water mat lay-up system, use fiberglass mat product number S211-0215. For filtration membrane mat lay-up system, please reference the Series 215ML product data sheet.
CMU & Cement Board: Self-priming. Can also be used as a bedding coat for Series 273 Stranlok ML system, use fiberglass mat product number S273-0273C.

TOPCOATS Series 20, FC20, 22, FC22, 27WB, 61, 66, L69, L69F, N69, N69F, V69, V69F, 104, 113, 114, 120-5002, L140, L140F, N140, N140F, V140, V140F, 141, 161, 201, 210, 237SC, 239SC, 251SC, 262, 264, 270, 273, 280, 281, 282, 287, 406, 431, 434, 435, 436, 446.
Note: Maximum recoat time for Series 406 is 72 hours.

SURFACE PREPARATION

STEEL **Non-Immersion Service:** SSPC-SP6/NACE 3 Commercial Blast Cleaning with a minimum 3.0 mil angular anchor profile.
Immersion Service: SSPC-SP10/NACE 2 Near-White Blast Cleaning with a minimum 3.0 mil angular anchor profile.

CONCRETE 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 a minimum ICRI-CSP 5 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.

CMU Allow mortar to cure for 14 days. Level protrusions and mortar spatter.

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

TECHNICAL DATA

VOLUME SOLIDS 100% (mixed) †

RECOMMENDED DFT **Resurfacer:** 1/32" to 1/8" (0.8 mm to 3.2 mm)
Up to 2" with the addition of Series 211 (see Mixing instructions) for filling honeycombs, blow holes and surface imperfections found in formed concrete surfaces. Larger imperfections may require multiple applications. Bedding coat for mat lay up is typically in the 1/16" range.

CURING TIME

Temperature	To Touch	Dry Through	Maximum to Recoat ‡
95°F (35°C)	4 hours	12 hours	14 days
75°F (24°C)	10 hours	24 hours	21 days
55°F (13°C)	18 hours	48 hours	21 days
45°F (7°C)	24 hours	72 hours	21 days
35°F (2°C)	32 hours	96 hours	21 days

‡ **Note:** If the Series 215 surface is exterior exposed for more than seven days, scarification is required before topcoating.
Note: Use "To Touch" cure information for minimum recoat times if succeeding topcoats are spray-applied and "Dry Through" if succeeding topcoats are applied by roller, brush, or trowel.

VOLATILE ORGANIC COMPOUNDS **Unthinned:** 0.08 lbs/gal solids (10 grams/litre) †

HAPS **Unthinned:** 0.0 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 and Part B (1 Part A to 1 Part B by volume)

SURFACING EPOXY | SERIES 215

PACKAGING

	PART A	PART B	When Mixed
Large Kit	3 gal. pail (partial fill)	5 gal. pail (partial fill)	4 gallons (15L)
Small Kit	1 gallon can	3 gal. pail (partial fill)	2 gallons (7.5L)
Touch-Up Kit	1 quart can	1 quart can	1/2 gallon (1.89L)

NET WEIGHT PER GALLON
13.28 ± 0.25 lbs (6.02 ± .11 kg) (mixed) †

STORAGE TEMPERATURE
Minimum 20°F (-6°C) Maximum 110°F (43°C)
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 RESISTANCE
(Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)

SHELF LIFE
12 months at recommended storage temperature.

FLASH POINT - SETA
Part A and Part B: N/A

HEALTH & SAFETY
This product contains 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
†

Thickness	Large Kit	Small Kit
1/32" (31 mils)	207 sq ft (19.2 m²)	103 sq ft (9.6 m²)
1/16" (62 mils)	103 sq ft (9.6 m²)	52 sq ft (4.8 m²)
1/8" (125 mils)	51 sq ft (4.8 m²)	26 sq ft (2.4 m²)
1/2" (500 mils)	13 sq ft (1.2 m²)	6 sq ft (0.6 m²)

MIXING
Mix the entire contents of Part A and Part B separately. Scrape all of the Part A material from the pail and into the Part B container by using a flexible spatula. Use a variable speed drill with a PS Jiffy blade and mix the blended components for a minimum of two minutes. Apply the mixed material within the pot life limits after agitation. **Note:** Tnemec Series 211-0211 fumed silica may be added at 0.75:1 by volume per mixed gallon where a thicker consistency is required to achieve the desired application and film build properties. Mix with Part A as directed in Mixing Instructions. Multiple lifts may be required. 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
Normally not required.

POT LIFE
45 minutes at 70°F (21°C) 25 minutes at 90°F (32°C)
Material temperatures above 90°F (32°C) will significantly reduce the pot life.

APPLICATION EQUIPMENT
Mortar hawk, trowels, broad knives and rubber floats are recommended. Series 215 can also be spray transferred using spray texture gun equipment.

Spray Application Equipment

Pump	Fluid Line	Spray Gun	Fluid Tips	Fluid Pressure	Atomizing Pressure	Hopper
WIWA 410 9:1 Ratio	25' 1" Diameter 10' 3/4" Diameter	WIWA Pole Gun	1/4" to 3/8"	180 to 360 psi (Adjust as necessary)	Adjust at gun for proper atomization	6.5 Gallons Stainless Steel
Graco 45:1, 56:1, X50, X60	3/8" to 1/2" I.D.	XTR-7	0.031"-0.041"	3500-4500 psi	N/A	6.5 Gallons Stainless Steel
Graco M680 10:1 Ratio	25' 1" Diameter 10' 3/4" Diameter	Flex Hose	No. 5 Nozzle	200 psi (Adjust as necessary)	Adjust at gun for proper atomization	10 Gallons Stainless Steel
Graco M680 10:1 Ratio	25' 1" Diameter 10' 3/4" Diameter	HTX	4C Fine Finish	250 psi (Adjust as necessary)	Adjust at gun for proper atomization	10 Gallons Stainless Steel

Cart mounted 9:1 ratio, air operated pump with air filter, regulator and lubricator, air control manifold, fluid outlet drain with drain valve and control air hose assembly. Refer to the operation manual for application instructions. Air requirements 80 CFM at 100 psi. **Atomization air must be dry, the use of an after cooler is recommended.**

SURFACE TEMPERATURE
Minimum 35°F (2°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 minimize outgassing, concrete temperature should be stabilized or in a descending temperature mode and the concrete primed with a suitable epoxy primer.

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.

CLEANUP
Flush and clean all equipment immediately after use with xylene, MEK, or when required by SCAQMD regulations, No. 74 Thinner.

† Values may vary with color.