



PRODUCT PROFILE

GENERIC DESCRIPTION

Glass Flake Inorganic Hybrid Epoxy

COMMON USAGE

A unique, low odor, low VOC, water-based epoxy coating featuring HydroLink curing technology for exceptional durability and protection of steel and concrete surfaces in immersion service, including potable water and mild wastewater. Easy to apply and solvent-free, Series 1220 is an excellent choice for coating tanks, reservoirs, and basins.

COLORS

00WH Tnemec White. **Note:** Additional colors may be available. **Note:** This coating can exhibit color change when subjected to sunlight. If this coating is being used as a finish coat, and exposed to UV light in exterior exposure, caution should be taken when selecting colors. Contact your Tnemec representative for more information.

FINISH

Flat

SPECIAL QUALIFICATIONS

Certified by **NSF International** in accordance with **NSF/ANSI/CAN Std. 61** and the extraction requirements of **NSF/ANSI/CAN 600**. Series 1220 is qualified for use on tanks and reservoirs, pipes, fittings, valves, and pumps. Reference Tnemec's certified product listing at www.nsf.org for additional details.

Series 1220 conforms to **AWWA C 210**.

This product is part of a coating system tested in accordance with ISO 12944-6 (2018). Contact your Tnemec representative for coating system test results.

COATING SYSTEM

SURFACER/FILLER/PATCHER

Series 215, 217, N218

PRIMERS

Concrete: Self-priming
Steel: Self-priming or Series 90-75, 98-H₂O

TOPCOATS

Series 73, 115, V115, 156, 157, 158, 180, 181, 971, 975, 1220, 1026, 1028, 1029, 1070, 1070V, 1071, 1071V, 1072, 1072V, 1080[‡], 1081[‡], 1094, 1095, 1096.

[‡]An extended cure time is needed when topcoating with Series 1080 or 1081. Reference additional recoat times listed below the cure table. **Note:** More than one finish coat may be required to achieve a uniform and desired gloss level.

SURFACE PREPARATION

STEEL

Wet Interior/Severe Exposure: SSPC-SP10/NACE 2 Near-White Blast Cleaning with a minimum angular anchor profile of 1.5 mils.

Dry Interior/Exterior Exposure: SSPC-SP6/NACE 3 Commercial Blast Cleaning with a minimum angular anchor profile of 1.5 mils.

CONCRETE

Allow new concrete to cure 28 days. For optimum results and/or immersion service, abrasive blast referencing SSPCSP13/NACE 6, ICRI CSP 2-4 Surface Preparation of Concrete and Tnemec's Surface Preparation and Application Guide. Fill all holes, pits, voids and cracks with 215, 217 or 218. For surfaces in need of extensive patching or resurfacing, reference the appropriate surfacer, filler, or patcher product data sheet for surface preparation requirements.

ALL SURFACES

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

TECHNICAL DATA

VOLUME SOLIDS

65.0 ± 2.0% (mixed) †

RECOMMENDED DFT

Standard: 4.0 to 10.0 mils (100 to 255 microns) per coat.
High-Build: 12.0 to 20.0 mils (305 to 510 microns).

CURING TIME

Temperature	To Touch	To Handle	To Recoat †	Immersion
95°F (35°C)	30 minutes	2 hours	3 hours	7 days
75°F (24°C)	1 hour	6 hours	8 hours	7 days
55°F (13°C)	2 hours	8 hours	16 hours	28 days
45°F (7°C)	3 hours	10 hours	24 hours	28 days

Curing time varies with surface temperature, air movement, humidity and film thickness. † The following minimum recoat times apply when topcoating with Series 1080 or 1081: 95°F (35°C) 12 hours, 75°F (24°C) and 55°F (13°C) 24 hours, 45°F (7°C) 4 days.

VOLATILE ORGANIC COMPOUNDS

Unthinned: 0.02 lbs/gallon (2.0 grams/litre)
Thinned 5% with water: 0.02 lbs/gallon (2.0 grams/litre)
Thinned 10% with water: 0.02 lbs/gallon (2.0 grams/litre)

HAPS

0 lbs/gallon solids

THEORETICAL COVERAGE

1,043 mil sq ft/gal (25.6 m²/L at 25 microns). See APPLICATION for coverage rates. †

NUMBER OF COMPONENTS

Two: Part A and Part B (two Part A to one Part B by volume.)

PACKAGING

KITS CONSIST OF:

	Part A (partially filled)	Part B (partially filled)	Yield (mixed)
Large Kit	5 gallon pail	6 gallon pail	5 gallons (18.9 L)
Small Kit	2 gallon pail	3 gallon pail	2 gallons (7.57 L)

NET WEIGHT PER GALLON

13.75 ± 0.25 lbs (6.34 ± 0.11 kg) (mixed) †

STORAGE TEMPERATURE

Minimum 35°F (2°C) Maximum 110°F (43°C)
Protect from freezing.

HYDROLINE™ | SERIES 1220

TEMPERATURE RESISTANCE (Dry) Continuous 250°F (121°C) Intermittent 275°F (135°C)**SHELF LIFE** 12 months at recommended storage temperature.**FLASH POINT - SETA** >230°F (110°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

Standard Build

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m ² /Gal)
Suggested	6.0 (150)	9.5 (240)	175 (16.3)
Minimum	4.0 (100)	6.0 (150)	262 (24.3)
Maximum	10.0 (255)	16.0 (405)	104 (9.7)

High Build

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m ² /Gal)
Suggested	14.0 (355)	22.0 (560)	75 (7.0)
Minimum	12.0 (305)	19.5 (495)	87 (8.1)
Maximum	20.0 (510)	31.0 (785)	52 (4.8)

(1) Note for Steel: Roller or brush application requires 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 thickness may adversely affect coating performance.**Note:** Reference the NSF website at www.nsf.org for details on the maximum allowable DFT.

MIXING

Power mix contents of each container, making sure no pigment remains on the bottom. Thin 5% to 10% by volume, adding the entire amount of desired thinner to the Part A container. Mix contents of Part A and thinner. Pour half of the thinned Part A material into the Part B while under agitation. Scrape pail walls to ensure material is mixed thoroughly. Once the contents of the Part B pail have reached the same color and consistency, add the remaining Part A, and continue mixing until material is uniform. Do not use mixed material beyond pot life limits. **Note:** Both components should be above 50°F (10°C) prior to mixing.

THINNING

Use cool, clean tap water. For airless spray, roller or brush applications applied at 4.0-6.0 mils (100-205 microns) dry film thickness, thin 10%. For high-build applications applied at 10-12 mils (280-305 microns) dry film thickness, thin 5%.

Caution: Thinning with high temperature water will significantly reduce the pot life. For best results, water temperature should not exceed 80°F (27°C).

POT LIFE

Thinned 5%: 60 minutes at 70°F (21°C) 30 minutes at 95°F (35°C)
Thinned 10%: 90 minutes at 70°F (21°C) 45 minutes at 95°F (35°C)

APPLICATION

Airless Spray

Tip Orifice	Atomizing Pressure	Mat'l Hose ID
0.019"-0.023" (483-584 microns)	3000-4500 psi (207-310 bar)	Material Hose: 3/8" (9.5 mm) Whip: 1/4" (6.4 mm)

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

Roller: Use a synthetic woven nap cover. For smooth surfaces use 3/8" to 1/2" (9.5 mm to 12.7 mm). To obtain proper penetration for rough or porous surfaces, use a longer nap cover. Smooth out build-up at laps.**Brush:** Use a stiff nylon brush. Work material into voids and avoid brushing out too thin.

SURFACE TEMPERATURE

Minimum 40°F (4°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 120°F (49°C). The substrate temperature should be at least 5°F (3°C) above the dew point. Coating will not cure below minimum surface temperature.

MATERIAL TEMPERATURE

For optimum application and handling, the material temperature during application should be between 70°F and 85°F (21°C and 29°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

CLEANUP

Flush out and clean all equipment immediately after use with water, followed by a final flush with MEK or Methyl Acetate.

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