



PRODUCT PROFILE

GENERIC DESCRIPTION Elevated Temperature Vinyl Ester

COMMON USAGE Series 1402 is a food grade, vinyl ester primer for complete FDA-compliant lining systems in concrete, steel or stainless-steel tanks. Fast-cure characteristics allow for quick application of subsequent coats, limiting downtime and facility disruption. Series 1402 is the only approved primer for the ProPolymer food grade product line. Replaces ProPolymer 4808.

COLORS 900 Clear

FINISH Gloss

SPECIAL QUALIFICATIONS Complies with the requirements and extractive limitations of US FDA 21 CFR Part 175.300 Resinous and Polymeric Coatings for tanks or other repeated use direct food storage or mixing vessels 5 gallons or greater under conditions of use C-E with all food types. Compliance was based upon raw material supplier documents, and third party analytical and extractive test results (HKGH02404112 and HKGH02409467).

COATING SYSTEM

SURFACER/FILLER/PATCHER Series 1402 extended with 211-0211

INTERMEDIATE Series 1420, 1422

TOPCOATS Series 1430, 1432

SURFACE PREPARATION

STEEL **Immersion Service:** SSPC-SP10/NACE 2 Near-White Metal Blast Cleaning or ISO Sa 2 1/2 Very Thorough Blast Cleaning with a minimum angular anchor profile of 3.0 mils. **Note:** For aggressive cargo exposures or immersion in elevated temperatures, an SSPC-SP5/NACE 1 or ISO Sa 3 Blast Cleaning to Visually Clean Steel with a minimum angular anchor profile of 3.0 mils may be required. Contact Tnemec Technical Service for more information.

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 3 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 and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS 85% (mixed). Series 1402 contains a reactive monomer and some loss will occur during application and cure. Actual solids by volume will vary depending upon temperature and air movement.

RECOMMENDED DFT CURING TIME 2.0 mils to 6.0 mils (50 microns to 152 microns).

Temperature	To Recoat	Immersion Service
90°F (32°C)	2 hours min. 24 hours max.	24 hours
70°F (21°C)	2 hours min. 24 hours max.	24 hours

Note: If more than 24 hours has elapsed between coats, the Series 1402 surface must be mechanically abraded before topcoating.

VOLATILE ORGANIC COMPOUNDS EPA Method 24
1.67 lbs/gallon (200 grams/litre)

THEORETICAL COVERAGE 1,363 mil sq ft/gal (33.4 m²/L at 25 microns). See APPLICATION for coverage rates

NUMBER OF COMPONENTS Two: Part A (base) and Part B (catalyst)

PACKAGING

	Part A (Partially filled)	Part B (Partially filled)	Yield (mixed)
Medium Kit	5 gallon pail	Pint bottle	5.0 gallons (18.9 L)
Small Kit	1 gallon can	4 oz bottle	1.0 gallons (3.7 L)

NET WEIGHT PER GALLON 8.89 lbs ± 0.25 lbs (4.0 ± 0.11 kg) (mixed)

STORAGE TEMPERATURE Minimum 40°F (4°C) Maximum 80°F (26°C)

TEMPERATURE RESISTANCE (Dry) Continuous 240°F (116°C)

SHELF LIFE Part A: 3 months; Part B: 12 months at recommended storage temperatures.

FLASH POINT - SETA Part A: 85°F (29°C) Part B: 133°F (56°C)

DUE TO THE REACTIVE NATURE OF THE VINYL ESTER RESINS AND THE CORRESPONDING LIMITED SHELF LIFE, EXPEDITIOUS USE OF THIS PRODUCT IS SUGGESTED, SINCE JOBSITE STORAGE CONDITIONS ARE BEYOND TNEMEC'S CONTROL, THIS PRODUCT IS NON-RETURNABLE.

PROPOLYMER™ | SERIES 1402

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)
Minimum	2.0 (50)	2.4 (62)	682 (63)
Maximum	6.0 (152)	7.0 (177)	227 (21)

Actual spreading rates will vary with surface profile, amount of overspray and surface irregularities. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance. THIS PRODUCT SHOULD NOT BE APPLIED BELOW 60°F (16°C) MATERIAL TEMPERATURE.

MIXING

Power mix contents of Part A (base) thoroughly, making sure no pigment remains on the bottom of the can. Add the Part B (catalyst) slowly to the Part A while under agitation. Ensure that all Part B is blended with Part A by scraping the pail walls with a flexible spatula. Continue to agitate until thoroughly mixed. Care should be exercised so as not to entrap air in the mixed material. Do not use mixed material beyond pot life limits.

THINNING

Do not thin.

POT LIFE

30 minutes at 75°F (24°C)

Note: At higher temperatures pot life will decrease (use caution in spray equipment). In hot weather, material should be cooled to 65°F to 80°F (18°C to 27°C) prior to mixing and application to improve workability and avoid shortened pot life.

SPRAY LIFE

25 minutes at 75°F (24°C)

APPLICATION EQUIPMENT

Airless Spray

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.013"-0.017" (330-431 microns)	3000-4000 psi (206-275 bar)	3/8" (9.5 mm)	60 mesh (250 microns)

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

Brush: Recommended for small areas only. Use high quality natural or synthetic bristle brushes.

Roller: Use 1/4" or 3/8" (6.5 mm to 9.5 mm) high quality synthetic woven nap covers.

SURFACE TEMPERATURE

Minimum 60°F (16°C), optimum 70°F (21°C), maximum 100°F (38°C). The surface should be dry and at least 5°F (3°C) above the dew point. At surface temperatures below 60°F (16°C), Series 1402 will not cure properly or obtain maximum chemical resistance. At relative humidities above 75%, the cure of this coating may be retarded. It is also recommended that all precautions be taken to insure that adequate forced-air ventilation exists.

MATERIAL TEMPERATURE

For optimum application, handling and performance, the material temperature during application should be between 60°F and 90°F (16°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and lengthen pot life. Warm temperatures will decrease viscosity and shorten pot life.

CLEANUP

Clean and purge lines immediately after use with MEK.

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