



PRODUCT PROFILE

**GENERIC DESCRIPTION** Elevated Temperature Epoxy Vinyl Ester

**COMMON USAGE** Series 1432 is an FDA-compliant, vinyl ester lining for food grade tanks, vessels and other structures. Highly filled with glass flake, Series 1432 is specially formulated to provide exceptional service in thermal cycling and chemical reaction vessels. Applied by roller or spray, it may be used as a stand-alone lining system or as a topcoat for added protection over trowel applied vinyl ester linings. Replaces ProPolymer 1422S.

**COLORS** 901 White, 909 Dent Yellow

**FINISH** Semi-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 (HKGH02410973).

COATING SYSTEM

**PRIMERS** **Steel:** Self-priming or Series 1402  
**Concrete:** Series 1402

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 1432 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** 10.0 to 25.0 mils (250 to 635 microns) per coat.

**CURING TIME**

Temperature	To Recoat	Immersion Service
90°F (32°C)	3 hours min. 3 days max.	20 hours
75°F (24°C)	4 hours min. 4 days max.	24 hours

**VOLATILE ORGANIC COMPOUNDS** EPA Method 24  
0.62 lbs/gallon (74 grams/litre)

**THEORETICAL COVERAGE** 1,363 mil sq ft/gal (33.4 m<sup>2</sup>/L at 25 microns). See APPLICATION for coverage rates.

**NUMBER OF COMPONENTS** Two: Part A (base) to 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** 10.9 lbs ± 0.25 lbs (4.9 ± 0.11 kg) (mixed)

**STORAGE TEMPERATURE** Minimum 50°F (10°C) Maximum 75°F (24°C)

**TEMPERATURE RESISTANCE** (Dry) Continuous 240°F (115°C)

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

**FLASH POINT - SETA** Part A: 79°F (26°C) Part B: 133°F (56°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.**

# PROPOLYMER™ | SERIES 1432

**APPLICATION**

**COVERAGE RATES**

	Dry MILS (Microns)	Wet MILS (Microns)	Sq Ft/Gal (m <sup>2</sup> /Gal)
Minimum	10.0 (250)	12.0 (298)	136 (13)
Maximum	25.0 (635)	29.0 (747)	55 (5)

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. **Note:** Do not over mix, caution should be taken to avoid shearing the glass flake. Do not use mixed material beyond pot life limits.

**THINNING**

Do no thin.

**POT LIFE**

45 minutes at 75°F (24°C)

**Note:** At higher temperatures pot life will decrease (use caution in spray equipment).

**SPRAY LIFE**

30 minutes at 75°F (24°C)

**APPLICATION EQUIPMENT**

**Airless Spray**

Spray Gun	Pump Size	Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
Graco XHF, XTR-7 Gun or WIWA 500F	45:1, 56:1, X50 or X60	0.025"-0.029" (635-736 microns)	3000-4000 psi (206-275 bar)	See below	n/a

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

**Material Hose ID:** Attach (1) 25' x 1/2" hose to the pump. Attach (1) 25' x 3/8" hose to the 1/2" line. Attach (1) 3-6' x 1/4" hose to the 1/2" line and gun.

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

**Roller:** Roller application acceptable, may require multiple coats to achieve specified thickness. Use a solvent resistant, phenolic core roller with a minimum 1/2" nap.

**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 1432 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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