



# TANK ARMOR® SERIES 370

## PRODUCT PROFILE

**GENERIC DESCRIPTION** Polyamine Epoxy

**COMMON USAGE** An epoxy lining formulated for corrosion control and aggressive chemical immersion in pressurized vessels, pipelines, storage tanks, industrial wastewater, etc. Series 370 exhibits superior resistance to a wide range of chemicals with excellent physical properties for long term durability and service life, and offers convenient airless spray application for both field and shop. Contains micro-fiber reinforcement for improved film integrity. **Note:** Application, environmental and design factors, chemical temperatures, and chemical mixtures can significantly impact coating performance, so due care should be exercised in the selection and use of the coating. Contact your Tnemec representative to review full project details before coating is selected.

**COLORS** 5020 Gray, 5023 Beige. **Note:** Epoxies chalk with extended exposure to sunlight. Significant color change should be expected and worsens with age and exposure to sunlight.

**FINISH** Gloss

## COATING SYSTEM

**SURFACER/FILLER/PATCHER** Series 215, 217, 218

**PRIMERS** **Steel:** Self-priming or Series 61  
**Concrete:** Self-priming or Series 61, 201

**Note:** To minimize pinhole formation in the topcoat, it is recommended that concrete substrates be fully resurfaced and/or primed prior to topcoat application.

## SURFACE PREPARATION

**STEEL** SSPC-SP5/NACE 1 White Metal Blast Cleaning or ISO Sa 3 Blast Cleaning to Visually Clean Steel with a minimum angular anchor profile of 3.0 mils.

**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 No. 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 or mechanically abrade concrete surfaces to remove laitance, curing compounds, hardeners, sealers and other contaminants and to provide a minimum ICRI-CSP 5 or greater surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.

## TECHNICAL DATA

**VOLUME SOLIDS** 100% (mixed)

**RECOMMENDED DFT** 20.0 to 40.0 mils (508 to 1016 microns)

| CURING TIME | Temperature | To Touch | Dry Through | To Place in Service | Max. Recoat |
|-------------|-------------|----------|-------------|---------------------|-------------|
|             | 75°F (24°C) | 3 hours  | 14 hours    | 5 days              | 7 days      |
|             | 55°F (13°C) | 7 hours  | 30 hours    | 14 days             | 7 days      |

**Note:** If more than 7 days have elapsed between coats, the Series 370 coated surface must be mechanically abraded before topcoating. Curing time will vary with surface temperature, air movement, humidity and film thickness.

**VOLATILE ORGANIC COMPOUNDS** EPA Method 24  
**Unthinned:** 0.32 lbs/gallon (38 grams/litre)

**HAPS** **Unthinned:** 0.1 lbs/gal solids

**THEORETICAL COVERAGE** 1,604 mil sq ft/gal (39.4 m<sup>2</sup>/L at 25 microns). See APPLICATION for coverage rates.

**NUMBER OF COMPONENTS** Two: Part A (epoxy) and Part B (amine).

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

| PACKAGING   | PART A (Partially filled) | PART B (Partially filled) | Mixed Yield         |
|-------------|---------------------------|---------------------------|---------------------|
| Large Kit † | 5 gallon pail             | 5 gallon pail             | 8 gallons (30.28 L) |
| Medium Kit  | 3 gallon pail             | 6 gallon pail             | 5 gallons (15.1 L)  |
| Small Kit   | 1 gallon can              | 1 gallon can              | 1 gallon (3.79 L)   |

†Plural Component application only.

**NET WEIGHT PER GALLON** 10.85 ± 0.25 lbs (4.92 ± .11 kg) (mixed)

**STORAGE TEMPERATURE** Minimum 20°F (-7°C) Maximum 110°F (32°C)  
For optimum handling and application characteristics, both material components should be stored or conditioned between 70°F and 80°F (21°C and 27°C) 48 hours prior to use.

**TEMPERATURE RESISTANCE** Chemical resistance varies depending on chemical exposure and temperature. Refer to Tnemec's Chemical Resistance Guide for further information.

**SHELF LIFE** 12 months at recommended storage temperature.

**FLASH POINT - SETA** Part A: >230°F (110°C) Part B: 184°F (84°C)

**HEALTH & SAFETY** This product contains 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.**

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**APPLICATION**

**COVERAGE RATES**

|         | <b>Dry MILS (Microns)</b> | <b>Wet MILS (Microns)</b> | <b>Sq Ft/Gal (m<sup>2</sup>/Gal)</b> |
|---------|---------------------------|---------------------------|--------------------------------------|
| Minimum | 20.0 (508)                | 20.0 (508)                | 80 (7.4)                             |
| Maximum | 40.0 (1016)               | 40.0 (1016)               | 40 (3.7)                             |

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 thickness may adversely affect coating performance.

**MIXING**

Mix the entire contents of Part A and Part B separately. Scrape all of the Part A into the Part B by using a flexible spatula. **Note:** Small kit will require the use of a separate container large enough to hold both components. Use a variable speed drill with a PS Jiffy blade and mix the blended components for a minimum of two minutes. During the mixing process, scrape the sides and bottom of the container to insure all of Parts A and B are blended together. Apply the mixed material within pot life limits after agitation. **Note:** A large volume of material will set up quickly if not applied or reduced in volume. Mixing ratio is one to one by volume. **Caution: Do not reseal mixed material. An explosion hazard may be created. Do not attempt to split kits.**

**THINNING**

**DO NOT THIN**

**POT LIFE**

20 to 25 minutes at 75°F (24°C)

**SPRAY LIFE**

20 to 25 minutes at 75°F (24°C)  
Flush the pump and lines immediately after spraying.

**APPLICATION EQUIPMENT**

**Airless Spray**

| <b>Pump Size</b>                | <b>Tip Orifice</b>                 | <b>Atomizing Pressure</b>      | <b>Mat'l Hose ID</b>             | <b>Manifold Filter</b> |
|---------------------------------|------------------------------------|--------------------------------|----------------------------------|------------------------|
| 45:1, 56:1, X50, 68:1<br>or X60 | 0.021"-0.025"<br>(533-635 microns) | 3400-4000 psi<br>(234-276 bar) | 3/8" to 1/2"<br>(9.5 to 12.7 mm) | N/R                    |

**Plural Component:** Please contact your Tnemec representative or Tnemec Technical Service for information.

**Brush or Roll:** Recommended for small areas only.

**SURFACE TEMPERATURE**

Minimum of 50°F (10°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 130°F (54°C). The substrate temperature should be at least 5°F (3°C) above the dew point.

**MATERIAL TEMPERATURE**

For optimum handling and application characteristics, both material components should be stored or conditioned between 70°F and 80°F (21°C and 27°C) 48 hours prior to use. Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten the spray and pot life.

**HOLIDAY TESTING**

If required by project specifications, High Voltage Discontinuity (spark) testing shall be performed using a Tinker & Rasor AP/W High Voltage Holiday Tester. Contact Tnemec Technical Service for voltage recommendations.

**CLEANUP**

Flush and clean all equipment immediately after use with Tnemec's No. 4 Thinner or MEK.

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