



TANK ARMOR® SERIES 390

PRODUCT PROFILE

GENERIC DESCRIPTION Novolac Epoxy

COMMON USAGE A thick-film reinforced epoxy internal lining formulated for corrosion control of chemical tanks and aggressive chemical immersion. Spray applied at 20 to 50 mils. Series 390 exhibits superior resistance to a wide range of chemicals with excellent physical properties for long term durability and service life. Refer to the Tank Armor® Chemical Resistance Chart. The Series 390 touch-up kit may be used to repair other Tank Armor linings. Contact Tnemec for more information.

COLORS 1232 Blue. **Note:** Epoxies chalk and yellow with age, extended exposure to UV and artificial lighting.

FINISH Semi-gloss

PERFORMANCE CRITERIA Contact your Tnemec representative for specific test results.

COATING SYSTEM

SURFACER/FILLER/PATCHER Series 351 Tank Armor®

PRIMERS Self-priming

SURFACE PREPARATION

STEEL SSPC-SP5/NACE 1/ISO Sa 3 White Metal Blast Cleaning with a minimum angular anchor profile of 3.0 mils. Refer to the Series 390 Tank Armor® Surface Preparation and Application Guide.

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

TECHNICAL DATA

VOLUME SOLIDS 100%

RECOMMENDED DFT 20.0 to 50.0 mils (508 to 1,270 microns) one coat with multiple passes.

CURING TIME

Temperature	To Touch	To Handle	Immersion
75°F (24°C)	2 hours	3 hours	24 to 36 hours

These times are based on a 20.0 mil (500 micron) dry film thickness. Higher film thicknesses, insufficient ventilation or cooler temperatures will require longer cure times. This coating commonly develops an amine-blush during cure. While this condition will not adversely affect performance of the coating, this blush must be removed by aggressive sweep blasting before applying additional coats. During high humidity conditions, it is recommended that the application be done while the temperatures are increasing. Cure time to achieve a minimum Shore D Hardness of 81 or Barcol GYZJ 935 hardness of 66 for immersion service is 24 to 36 hours. In order to obtain an accurate reading, the minimum DFT must be 30 mils.

VOLATILE ORGANIC COMPOUNDS 0.30 lbs/gallon (35 grams/litre)

HAPS 0.27 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: Two Part A (epoxy) to One: Part B (amine)

PACKAGING KITS CONSIST OF:

	PART A (Partially filled)	PART B (Partially filled)	Yield (mixed)
Large Kit	2-55 gallon drums	1-55 gallon drum	150 gallons (567.8 L)
Medium Kit	2-6 gallon pails	1-6 gallon pail	15 gallons (56.7 L)
Small Kit	1-5 gallon pail	1-3 gallon pail	4 gallons (15.1 L)
Touch-Up Kit (1 tube)	2 ounces	4 ounces	6 ounces (175 mL)

Note: Touch-Up Kit consists of six (6) tubes along with twelve (12) disposable static mixers.

NET WEIGHT PER GALLON 12.09 ± 0.25 lbs (5.48 ± .11 kg) (mixed)

STORAGE TEMPERATURE Minimum 50°F (10°C) Maximum 110°F (43°C)
For optimal handling and application characteristics, both material components should be stored at a minimum of 70°F (21°C) or higher for 48 hours prior to use.

TEMPERATURE RESISTANCE (Dry) Continuous 275°F (135°C) Intermittent 300°F (149°C)

SHELF LIFE 24 months at recommended storage temperature.

FLASH POINT - SETA Part A: >200°F (95°C) Part B: >200°F (95°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.

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APPLICATION

COVERAGE RATES

Before commencing, obtain and thoroughly read the Series 390 Tank Armor® Surface Preparation and Application Guide.

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m ² /Gal)
Suggested	30.0 (762)	30.0 (762)	53 (5.0)
Minimum	20.0 (508)	20.0 (508)	80 (7.5)
Maximum	50.0 (1270)	50.0 (1270)	32 (3.0)

Allow for overspray and surface irregularities. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance.

MIXING

Power mix contents of each container, making sure no pigment remains on the bottom.

Pre-Heating: Heat each component to 110°-120°F (43°-49°C) prior to spraying. Refer to the Series 390 Tank Armor® Surface Preparation and Application Guide for details.

Touch-Up Kit: Equipment: A dispensing gun with a thrust ratio of 26:1 is required (F100-TKAP). Material tube must be used in conjunction with provided disposable static mixer in order to ensure proper mixing.

Usage: Unscrew retaining ring and remove plug. Save plug in case entire tube is not used. Install static mixing element, replace retaining screw ring, and install tube in gun. Point assembly up and slowly pull the trigger to de-air the mixer. Dispense approximately 1 fluid ounce of material to waste and continue to pump until material is of uniform color with the Part A completely blended with the Part B. Use a putty knife or spatula to ensure adequate coverage and mixing.

THINNING

Do Not Thin. Thinning will adversely affect performance properties.

PURGE TIME

Less than 60 seconds.

APPLICATION EQUIPMENT

HEATED PLURAL COMPONENT AIRLESS EQUIPMENT ONLY. Please refer to the Series 390 Tank Armor® Plural Component Equipment Recommendations Guide for complete instructions on equipment.

Contact Tnemec Technical Service for guide and equipment recommendations.

Brush: Recommended for small areas, repairs and weld seams.

SURFACE TEMPERATURE

Minimum 50°F (10°C) Maximum 120°F (49°C)

The surface should be dry and at least 5°F (3°C) above the dew point. Do not apply when humidity exceeds 80%. For tanks, dehumidification equipment is recommended if humidity exceeds 80%.

CLEANUP

Clean up and purge lines immediately after use with No. 4 Thinner.

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