

EPOXYTEC CPP 456 EPOXY LINER



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TECHNICAL DATA SHEET



PRODUCT PROFILE

GENERIC DESCRIPTION

Ultra-High Build, Structural-Grade Applied Microfiber Reinforced Polymer (FRP) Polycyclic Epoxy

COMMON USAGE

Epoxytec CPP Sprayliner™ is a two-component, 100% solids, ultra-high build, spray-applied high strength and reinforced polycyclic amine epoxy system. Formulated specifically for rehabilitation and lining of wastewater treatment plant (WWTP) structures, and other large wall, open or semi-open structures; designed with high moisture tolerance with H₂S resistance and sealed I&I barrier protection. Designed for spray applicators seeking to utilize plural component heated spray application. The material can be sprayed ultra-high build, up to 3/8" (375 mils). Blended with reinforcing agents and various microfibers, Epoxytec CPP Sprayliner™ creates an applied reinforced liner as a microfiber-reinforced polymer (FRP), with high mechanical strength to protect against corrosion and seal I&I.

COLORS

5032 Structural Gray

FINISH

Orange-peel

COATING SYSTEM

SURFACER/FILLER/PATCHER

Mortartec Ceramico, Mortartec Silicate, Series 217.

PRIMERS

Self-priming, SE-d Primecoat

SURFACE PREPARATION

CONCRETE

Allow new cast-in-place concrete to cure a minimum of 28 days at 75°F (24°C). Prepare the concrete by abrasive blasting, high or ultra-high pressure water cleaning, and/or approved mechanical methods to achieve clean, sound, and profiled concrete in accordance with SSPC-SP13/NACE No. 6 "Surface Preparation of Concrete." A minimum ICRI

profile of CSP 5 or higher shall be achieved with a minimum pH 9. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer. **Note:** Epoxytec CPP Sprayliner™ is self-priming and may be applied direct to concrete (DTC). However, should an abnormal or conditional situation exist (i.e. outgassing, MVT, etc), primers and/or resurfacers (although optional) can assist, and may be recommended.

STEEL

Before preparing steel, please inspect and remove oil, grease, or other contaminants. Abrasive blasting (or other approved mechanical methods) must be used in order to achieve a clean surface in accordance with SSPC-SP10/NACE No. 2 "Near White Blast Cleaning" and a minimum profile of 4.0 mils (100 microns). To prevent flash rusting, consider the use of a Tnemec recommended holding primer.

ALL SURFACES

Surface must be clean, sound, and profiled. Remove all dust, contaminants, grease, curing compounds, rust, impregnation, waxes, foreign particles, and disintegrated materials from the surface, in order to achieve a clean and profiled surface. Methods outlined herein are a basis of design for generalized guidance. Refer to epoxytec.com for additional system design detail and guidelines; please consult with your Tnemec representative on other specific design considerations.

TECHNICAL DATA

VOLUME SOLIDS

100%

RECOMMENDED DFT

Mild Conditions as a Protective Coating, Non-Structural:

80.0 mils (2030 microns) minimum.

I&I or Aggressive Conditions, as a High Strength Liner,

Structural Film: 125.0 mils (3175 microns) minimum.

Note: "Structural" reference herein describes an applied and bonded high-strength film designed to hold back low pressure inflow/infiltration (I&I) and other low pressure water transmission through concrete. For structures requiring fully structural design consideration, criteria and variables will need to be calculated for specific design thickness recommendations by a licensed professional engineer.



TECHNICAL DATA (cont.)

CURING TIME

Temperature	Full Cure
140°F (60°C)	30-45 minutes
120°F (49°C)	2-4 hours
95°F (35°C)	10-12 hours
77°F (25°C)	18-24 hours

VOLATILE ORGANIC COMPOUNDS (VOCs)

0.04 lbs/gal (5 g/l)

THEORETICAL COVERAGE

1,604 mil sq ft/gal (39.3 m²/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)	Yield (mixed)
Extra Large Kit	55 gallon drum	55 gallon drum	100 gallons (378.6 L)
Large Kit	6 gallon pail	6 gallon pail	10 gallons (37.9 L)

NET WEIGHT PER GALLON

9.82 ± 0.25 lbs (4.5 ± 0.11 kg) (mixed)

STORAGE TEMPERATURE

For optimum handling and application characteristics both material components should be stored or conditioned between 70°F (21°C) and 85°F (29°C) 48 hours prior to use.

TEMPERATURE RESISTANCE

Contact your Tnemec representative for more information.

SHELF LIFE

24 months at recommended storage temperatures.

FLASH POINT - SETA

>230°F (110°C)

HEALTH AND 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.**

APPLICATION

COVERAGE RATES

	Dry Mills (Microns)	Wet Mills (Microns)	Sq Ft/Gal (m ² /Gal)
Minimum (Non-Structural)	80.0 (2030)	80.0 (2030)	20.0 (1.86)
Minimum (Structural Film)	125.0 (3175)	125.0 (3175)	12.8 (1.19)
Maximum (per coat)	375.0 (9525)	375.0 (9525)	4.28 (0.4)

MIXING

Requires specialized plural application equipments. See APPLICATION EQUIPMENT.

THINNING

Do not thin.

PURGE TIME

3 minutes at 105°F (42°C)

APPLICATION EQUIPMENT

Epoxytec CPP Sprayliner™ is designed to be sprayed utilizing specialized equipment sold by approved equipment vendors of Epoxytec. This is a heated, plural component system. Epoxytec limits the sale of Epoxytec CPP Sprayliner™ for warranty until all equipment and know-how is validated. For detailed spray equipment specifications, heating, pressure, power, hose specs, purging/cleaning requirements or designs-contact Tnemec Technical Services.

SURFACE TEMPERATURE

Minimum 45°F (7°C) Maximum 130°F (54°C)

APPLICATION (cont.)

MATERIAL TEMPERATURE

Epoxytec CPP Sprayliner™ is designed to be sprayed utilizing specialized heated plural component. Material conditioning parameters are detailed on spray equipment specifications and Application Guide - contact Tnemec Technical Services.

CLEANUP

Purge and clean with Epoxytec Cut 5 solvent or Tnemec No. 42 Thinner.

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EPOXYTEC CPP 456 EPOXY LINER PART A



EPOXYTEC CPP 456 EPOXY LINER PART B

