product data sheet Uroflex



PRODUCT PROFILE

GENERIC DESCRIPTION

Urethane-Modified Epoxy

COMMON USAGE

Epoxytec Uroflex is a two component, high build, 100% solids urethane-modified epoxy (UME) hybrid coating/lining system specifically designed for corrosion protection in immersive service domestic wasterwater treatment environments. Uroflex is a high build, self-leveling coating system incorporating a high degree of flexural modulus. Adheres impressively well to concrete and steel. Uroflex is applicator friendly and easy to apply; conveniently produced in a one-to-one mix ratio by volume. Uroflex is self-priming and can be applied by brush, roller, or spray to provide applicators usability and ease of application.

COLORS

Red, Beige

FINISH

Gloss

COATING SYSTEM

PRIMERS

Self-priming

SURFACE PREPARATION

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 5 surface profile. Large cracks, voids and other surface imperfections should be filled with a recommended filler or surfacer.

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 anchor 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

Concrete:

Roller/Brush: 15.0 to 25.0 mils (380 to 635 microns) per coat

Spray: 15.0 to 40.0 mils (380 to 1016 microns) per coat Metal:

Roller/Brush: 15.0 to 25.0 mils (380 to 635 microns) per coat

Spray: 15.0 to 25.0 mils (380 to 635 microns) per coat.

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PART OF THE TNEMEC FAMILY OF COATINGS

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Published technical data and instructions are subject to change without notice. The online catalog at epoxytec.com should be referenced for the most current technical data and instructions or you may contact your Epoxytec representative for current technical data and instructions.

TECHNICAL DATA (cont.)

CURING TIME

Temperature	To Topcoat	Full Cure
77°F (25°C)	6 hours min. 72 hours max.	24 hours

VOLATILE ORGANIC COMPOUNDS (VOCs)

0.00 lbs/gallon (0 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	Part B	Yield (mixed)
Small Kit	2 gallon pail	5 gallon pail	4.0 gallons (15.1 L)

NET WEIGHT PER GALLON

Beige: 8.40 ± 0.25 lbs (3.8 ± 0.11 kg) (mixed) **Red:** 8.38 ± 0.25 lbs (3.8 ± 0.11 kg) (mixed)

STORAGE TEMPERATURE

For optimum handling and application characteristics, both material components should be stored or conditioned between 70°F and 85°F (21°C and 29°C) 24 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.

TEMPERATURE RESISTANCE

Dry (Continuous): 0°F to 160°F (-18°C to 71°C) Intermittent: 0°F to 140°F (-18°C to 60°C)

SHELF LIFE

24 months at recommended storage temperature.

FLASH POINT - SETA

255°F (124°C)

HEALTH AND SAFETY

This product contains 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**.

APPLICATION

COVERAGE RATES

	Dry Mils (Microns)	Wet Mils (Microns)	Sq Ft/Gal (m²/Gal)
Suggested	20.0 (510)	20.0 (510)	80 (7.5)
Minimum	15.0 (380)	15.0 (380)	107 (9.9)
Maximum	40.0 (1015)	40.0 (1015)	40 (3.7)

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. 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 ensure all of Part A and Part 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

Thin with Epoxytec No. 1 Reduction or Epoxtec Cut 5. Do not exceed thinning of 3% by volume.

POT LIFE

30 minutes at 77°F (25°C).

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APPLICATION (cont.)

APPLICATION EQUIPMENT Airless Spray

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

Note: Material must be gravity fed through a material hopper. Material will not feed through a suction tube.

Roller: Use high quality 3/8" to 1/2" (9.5 to 12.7 mm) synthetic woven nap roller covers.

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

Plural Component: Please contact Themec Technical Service for information.

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.

CLEANUP

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

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