

## PRODUCT DATA SHEET

# Mortartec Cladliner



### PRODUCT PROFILE

#### GENERIC DESCRIPTION

Epoxy Modified Cement Liner

#### COMMON USAGE

Epoxytec Mortartec Cladliner is a stand-alone epoxy-modified cement lining system. A highly advanced, formulated epoxy blend incorporating cutting-edge epoxide technology with proprietary engineered curing, combined with a specific balance of Portland cement, high-density graded silica aggregate, and synthetic fibers. Once mixed, it results in a smooth mortar application and cures with suitable acid resistance to protect from corrosion derived from mild-to-moderate hydrogen sulfide ( $H_2S$ ) conditions. This coating is designed as a stand-alone system for moderate  $H_2S$  environments (up to 100 ppm) and is great for protecting concrete, brick, and masonry sanitary sewer manholes, and wastewater system assets.

#### COLORS

Blue. **Note:** Due to the product's cement content, color variations can occur. However, these changes in color are aesthetic only and will not affect performance or certifications.

### COATING SYSTEM

#### PRIMERS

Self-priming

### SURFACE PREPARATION

#### CONCRETE

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.

#### CMU

Allow mortar to cure for 28 days. Level protrusions and mortar spatter.

#### PAINTED SURFACES

Not recommended.

#### ALL SURFACES

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

### TECHNICAL DATA

#### VOLUME SOLIDS

100%

#### RECOMMENDED DFT

1/4" / 250 mils / 6.3mm to 1" / 1,000 mils / 25.4 mm per pass.

#### CURING TIME

Temperature	To Touch	Full Cure
77°F (25°C)	3-4 hours	36 hours

#### VOLATILE ORGANIC COMPOUNDS (VOCs)

0.00 lbs/gal (0 g/l)

#### THEORETICAL COVERAGE

1,604 mil sq ft/gal (39.3 m<sup>2</sup>/L at 25 microns). See APPLICATION for coverage rates.

#### NUMBER OF COMPONENTS

Three: Part A (epoxy), Part B (amine) and Part C (cement blend).

#### PACKAGING

	Part A	Part B	Part C	Yield (mixed)
UniPack †	1 gallon jug	16 oz jar	40 lb bag	2.73 gallons (10.3 L)

† All components are packaged in a 5 gallon pail.



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## TECHNICAL DATA (cont.)

## STORAGE TEMPERATURE

Minimum 40°F (4°C) Maximum 110°F (43°C)

For optimum handling and application characteristics, all material components should be stored or conditioned between 70°F to 80°F (21°C to 27°C) 48 hours prior to use. Protect Parts A & B from freezing; discard if frozen. Protect Part C from moisture; store in dry environment off ground.

## TEMPERATURE RESISTANCE

(Dry) Continuous 170°F (77°C) Intermittent 200°F (93°C)

## SHELF LIFE

12 months at recommended storage temperature.

## FLASH POINT - SETA

&gt;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

Thickness	Coverage/Kit (0.39 ft <sup>3</sup> ) (theoretical)
1/4" / 250 mils / 6.3 mm	17.5 sq ft (1.6 m <sup>2</sup> )
1/2" / 500 mils / 12.7 mm	8.75 sq ft (0.81 m <sup>2</sup> )
3/4" / 750 mils / 19.1 mm	5.9 sq ft (0.55 m <sup>2</sup> )
1" / 1000 mils / 25.4 mm	4.4 sq ft (0.41 m <sup>2</sup> )

## MIXING

Pour liquid Part B into new, empty bucket. Any remaining Part B shall be removed by adding 3 to 5 oz. (88.7 to 147.9 ml) of liquid Part A, re-sealing lid and shaking quart can for 5 to 10 seconds; pour contents into bucket. Add remaining liquid Part A into bucket and blend for 30 seconds. Under agitation, slowly sift Part C powder into the mixed liquids taking care

not to deposit entire contents of Part C at once. Mix for two minutes or until the cement-sand is thoroughly wetted and a smooth consistency is achieved. **Important: Do not add additional Part C.**

## THINNING

If Mortartec Cladliner begins to thicken in pail during use, drill mix for an additional 20 to 30 seconds to drop the viscosity. Do not add additional water.

**Hand Application:** Do not add water.

**Low-Pressure Spray Application:** To transfer the material, may thin up to 6 oz. (177.4 ml) per kit. **Note:** Use only potable water.

## APPLICATION

When using Mortartec Cladliner, surface should be "pre-wet" or dampened with potable water to a Saturated Surface Dry (SDD) condition; the concrete is darkened by water but there is no pooling on the surface. Do not oversaturate the surface.

## APPLICATION EQUIPMENT

Mortar Hawk, steel, stiff concrete finishing trowels, broad knives and rubber floats are recommended.

## APPLICATION

For troweling inside and outside corners, the use of a radius or margin trowel is recommended. Material can be transferred to the surface by utilizing hydraulic spray equipment (i.e. WIWA 410 9:1 or 600 12:1 pump, Graco M680 Mortar Pump 10:1, Graco ToughTek Piston Pump) followed by troweling to seal the material. No special ACI 308 curing requirements - ambient cure only. For a smoother finished appearance, trowel licks may be reduced by using a 1/4" (6.35 mm) nap roller cover lightly dampened with water over the sealed Cladliner material. **Note:** If white liquid is brought to the surface during this process, the Cladliner material is being overworked and/or oversaturated. Overworking or oversaturating the surface may have an adverse effect on the adhesion of subsequent coatings applied. Let Cladliner cure and remove surface deposit using concrete rub brick.

## POT LIFE

1 hour at 77°F (24°C)

**APPLICATION (cont.)****SURFACE TEMPERATURE**

Minimum of 45°F (7°C), optimum 65°F to 80°F (18°C to 27°C), maximum of 90°F (32°C). Application should be performed out of direct sunlight and during times when the surface temperature of the concrete is stable or in a descending pattern. To minimize outgassing, concrete temperature should be stabilized or in a descending temperature mode.

**MATERIAL TEMPERATURE**

For optimum application, handling and performance, the material temperature during application should be between 70°F and 90°F (21°C and 32°C). Temperature will affect the workability. Cool temperatures increase viscosity and decrease workability. Warm temperatures will decrease viscosity and shorten pot life.

**CLEANUP**

Flush and clean all equipment immediately after use with warm water.