

PLS-614 Ultra High Build Epoxy Mastic

Description

PerpetuCoat M[™] is an exceptional two-component, solvent-free, 100% solids, ultra high build epoxy coating that can be applied to dry, damp or wet surfaces. Its thixotropic characteristics provide sag and run resistance, and allow it to be hand or spray applied to vertical and overhead surfaces. Its uniqueness is its ability to displace water while forming a tenacious bond to the substrate. Its flow characteristics result in a smooth, glossy, homogeneous film that is impervious to water and is resistant to abrasion, oils and chemical attack.

Typical Uses

New or existing structures where waterproofing is required, or areas where exposure to concentrated acids or other caustic materials may be expected, such as:

- Manholes
- Lift Stations
- Clarifiers
- Digesters
- Tanks
- Large Diameter Pipes
- Chemical Troughs
- Wastewater Facilities
- Secondary Containment
- Floors and Walls
- Waterproofing for concrete, metal, and wood

Physical Properties

Hardness	ASTM D-2240	72 Shore D
Tensile strength	ASTM D-638	12,400 PSI
Compressive strength	ASTM D-695	16,800 PSI
Flexural strength	ASTM D-790	13,900 PSI
Ultimate Elongation	ASTM D-638	4.50%
Bond (Concrete)	ASTM D-4541	Substrate Failure
Shear Strength	ASTM D-2344	4,060 PSI
Heat Distortion	ASTM D-648	220°F
Impact Resistance	NCS PS 55-75	160 in/lbs

VOCs: None

Cure Time: Approx. 4 hours at 70°F

Typical Installation Thickness: 125 mils

Color: Part A - White, Part B - Black, Mixed - Grey

Packaging

Bucket Kits: 1 Gallon Kit (.5 Gal A, .5 Gal B), 2 Gallon Kit (1 Gal A, 1 Gal B), & 10 Gallon Kit (5 Gal A, 5 Gal B)
 Drum Kits: 60 Gallon Kit (30 Gal A, 30 Gal B)

Coverage

Approx 12 Sq. Ft At 125 mils

Thinning

Do not thin, Use PLS-613

Components & Mix Ratio

Part A: Resin & Part B: Curing Agent ; Mix at 1:1 Ratio

Cure Time

Tack-free in approx. 4 hours at 70°F. Complete cure 4 days

Application

Surface Preparation - Concrete & Masonry: Prior to application surface must be free of any existing coatings, surface treatments, surface contaminants, loose materials, and weak materials. Host structure must be structurally sound. All active and potential infiltration must be stopped. Surface shall be cleaned with a 4,000 PSI pressure wash to remove any surface contaminants. Where pressure washing is insufficient to remove surface contaminants, abrasive blasting shall be used. After abrasive blasting the surface should be cleaned again with a 4,000 PSI pressure wash. Surface shall be resurfaced with an approved cement (PLS-507 recommended) to create a smooth surface free of divots, voids, or similar surface defects. It is recommended to remove all stairs and unnecessary fixtures.

Surface Preparation - Steel: Prior to application surface must be free of any existing coatings, surface treatments, surface contaminants, and rust. Host structure must be structurally sound. All active and potential infiltration must be stopped. Surface shall be cleaned with abrasive blasting to a SSPC-SP 10/NACE No.2 "Near-White Blast". It is recommended to remove all unnecessary fixtures.

Mixing - Hand Application: Epoxy components shall be combined within a clean disposable bucket and mixed using a joint compound mixing blade until it forms a uniform gray color. No streaks or striations should be visible.

Mixing - Spray: Epoxy components shall be pumped through static mixer before being sprayed. Sizing of mixer should be matched with spray equipment to produce a uniformly mixed material at its output.

Application (cont.)

Pot Life: Approximately 30 minutes at 70°F

Application: After resurfacing, it is recommended to wait a minimum of 12 hrs before beginning application, after using an approved resurfacing material. The surface may be saturated, but must be dry to the touch to prevent water from hindering adhesion. At all times a wet or prepped edge must be maintained. The epoxy shall be hand trowed or sprayed at approximately 125 mills on to the surface of the structure until the entire surface is completely coated. The Coating shall extend from 2 inches above the bottom of the manhole frame down to the water line or invert in manholes. The invert may be lined as requested if flow can be stopped or bypassed for application if specified. For other structures liner should extend 3 inches beyond any joints in specified application area. Substrate shall be between 32°F and 140°F. Material may be heated up to 140°F in spray applications or up to 95°F in hand applications to assist application.

Curing: Once the liner has cured sufficiently to resist the flow of water / effluent it may be exposed as necessary. Coating will continue to cure underwater. This delay is required to prevent flow from removing the top layer of epoxy.

Re-coat: Application is best when completed in one application. Additional epoxy can only be applied to a wet or tacky epoxy. Once this window passes the surface must be ground to a rough surface before re-coating, in order to insure proper bonding.

Clean Up: Cleaning of tools can be performed using acetone, MEK, Xylene, or similar solvents. To clean skin soap and water is recommended. Please read Safety Data Sheets for more health and safety information.

Shelf Life and Storage

Shelf Life: 18 Months from the Date of Manufacture

Storage: Material should be stored in its original unopened containers, kept indoors, and away from extreme temperatures

Safety

Follow all local and national safety regulations. Always use appropriate industry safety techniques and equipment. Read and follow the safety information listed in the Safety Data Sheets. Do not use if you do not understand or can not comply with information provided on Safety Data Sheets, do not use this product. Contact us to obtain Safety Data Sheets.

Warranty

Protective Liner Systems, Inc. warrants its products to be free of manufacturing defects. Furthermore, Protective Liner Systems, Inc. warrants that **PerpetuCoat MTM**, for a period of one (1) year from the date of installation, will meet the currently published physical properties when installed by a Certified Applicator

Information contained on this data sheet may change at any time. Protective Liner Systems, Inc. is not responsible for direct or indirect damages as a result of changes to this data sheet and reserves the right to make such changes at anytime without prior notification.