

IMPERVIUS™ ME BRIDGE DECK PRESERVATION OVERLAY SYSTEM

Description

IMPERVIUS™ ME is a 100% solids, 2 component, modified polymer, when used with selected aggregates; is designed to protect reinforced concrete, steel plate and FRP composite bridge decks from adverse effects of traffic, extreme weather conditions and deicing chemicals as well provide a skid resistant surface. Meets applicable ASTM, AASHTO and State specifications.

Use

May be used as a resin binder layer for single or multiple layer broadcast aggregate overlays on variety of subtrates. May also be used as slurry or polymer concrete in varying thickness depending on use and exposure.

Benefits

Prevents ingress of water and deicing chemicals

Excellent adhesion to concrete, steel, asphalt, FRP composites

Adheres to aggregates for extended periods, providing skid resistance

High elongation yet tough polymer system to withstand minor movements

Fast ready for traffic times

Data*

Property	Value	Test Method
Percent Solids	100%	
Gel Time	15-20 minutes	100 grams
Adhesion @ 24 Hrs	Substrate Failure	ASTM D 4541/ ACI 503R
Tensile Strength, 7 Days	2500 psi min	ASTM D 638
Tensile Elongation, 7 Days	30 -45%	ASTM D 638
Water Absorption @ 24 Hrs	.5% Max	ASTM D 570
Compressive Strength	> 1000 psi	3 Hrs ASTM C 109
Compressive Strength	> 5000 psi	24 Hrs ASTM C 109

^{*} Samples cured at 75 °F and 50% RH. Results can vary and depend on mixing method, equipment, curing conditions, test equipment, sample handling, sample conditioning, consitency and technicians.

Packaging Mix Ratio: 1 Volumes Part A: 1 Volume Part B

5 Gallon pails: 10 gallon unit 50 Gallon drum: 100 Gallon unit 250 Gallon IBC also available

Limited Warranty: P3 warrants this product to be free of any defects resulting form its design and manufacturing. All warranty claims shall be submitted in writing to P3 immediately upon discovery or before expiration of shelf life of product. Remedy is limited to replacement of materials purchased. P3 disavows any other representation or warranty, express or implied, or liability relating to the condition or use of the product and in no event shall P3 be liable to user or any third party for any direct or indirect consequential or incidental damages.

To Apply Surface

Concrete - Shotblast clean to remove contaminants. Remove lose debris by vacuum or blow with dry compressed air. Sandblast where shotblasting is not possible.

Asphalt - High pressure water wash if necessary, followed by dry air so no debris or water remains on Steel - Abrasive shot or sand blast to SSPC SP-10. Apply before flash rust appears.

FRP - Consult P3 for details

Patching

Patching systems shall be free of Magnesium Phosphate. Care should be taken when using high early strength systems and adequate curing should be allowed. On typical concrete decks moisture should not exceed 4.5 % measured by acceptable moisture detection systems. Extra precaution shall be taken for decks with 'in situ' forms.

Mixing

Manual: Measure the two components separately; Part A and Part B according to mix ratio by volume (1A:1B) in containers free of mositure, debris, solvents or any contaminants. Pour into a clean mixing container, one component at a time, thoroughly mix ensuring no unmixed material remains. Time of mixing will vary with batch size and temperatures. It is not recommended to mix more than 15 mixed Gallons at any one time. Working time is reduced due to exotherm. Pour immediately on surface and spread using roller or squeegee. Broadcast aggregate. Wear appropriate Protective Equipment while handling.

Mechanical: Volumetric, positive displacement measuring, mixing and dispensing equipment may be used as approved by P3 as a manufacturer or as provided by P3. Equipment shall be capable of conditioning components stored in independent tanks and consistently measure, mix and dispense liquid to be spread on surface manually or mechanically. Broadcast aggregate before mixed material begins to get tacky.

For Slurry or Polymer concrete mix design and instructions please contact P3

Aggregate

Choice of aggregate shall be determined by desired aesthetics, wear, polish and fracture resistance. Recommended aggregates may be angular basalt, granite, flint and bauxite. Angularity will vary with intended use. Selected aggregate shall be washed, dried and free of moisture when broadcast or mixed into the liquid polymer. Consult P3 for specifications.

Caution

Part A: Contains Epoxy Resin. Skin and eye irritant. Prolonged contact can cause sensitization.

Part B: Contains Amines. Skin and eye irritant. Can cause severe burns when in contact with skin and eyes. Use proper clothing and respirators. Consult Safety Data Sheet for details.

First Aid

Remove contaminated clothing. Wash thoroughly with water and soap. If contact with eyes, irrigate with water for 15 minutes and consult physician. Remove to ventilated area. If ingested, do not induce vomit, seek medical attention immediately. Consult Safety Data Sheet for details.

Keep out of reach of children. Not for internal consumption. For industrial use only. Keep containers properly closed.

All information and recommendations provided by P3 are in good faith based on P3 current knowledge and experience of its products when handled properly and according to P3 instructions. P3 assumes no responsibility of factors outside of its control that would impact result and behavior of P3 products. User of P3 products must test these products for suitability for the intended application and purpose. P3 reserves the right to change properties of its products without notice. Please read P3 product Safety Data Sheet entirely and thoroughly prior to using P3 products. It is intended for your safety. Use proper Personal Protective Equipment per Safety Data Sheet. Per EPA Method 24 40 CFR Appendix A, VOC<150 mg/L