



POLYMERICA PRODUCT DATA

MasterProof PEM Polyurea Elastomeric Membrane

PRODUCT PRESENTATION

MasterProof PEM is a liquid applied, 100% solids elastomeric compound designed for use as a waterproofing membrane for above and below grade structures, between slabs or under tile, brick, or epoxy overlayments.

PEM is suitable for balconies, decks, showers, and process flooring.

Because of its elastomeric properties, **PEM** is also a good choice for the suppression of crack transmission between moving concrete slabs and an overlayment or coating system. **PEM** is often specified as an underlayment prior to the installation of epoxy terrazzo surfacing.

PRODUCT FEATURES

- ➔ maintains elastomeric properties at temperatures as low as 0°F
- ➔ offers polyurethane performance with no free isocyanates
- ➔ 100% solids, solvent free
- ➔ low odor, can be used in occupied facilities
- ➔ does not contain coal-tar or asphalt
- ➔ does not embrittle with age
- ➔ excellent abrasive and chemical resistance

COVERAGE

64 square feet per gallon yields 25 mils DFT. Two coats are recommended for general service.

PACKAGING

Unit Size	Part A	Part B	Weight*
1-1/8 gallons	1 x 1	1 x 1/8	12 lbs.
2-1/4 gallons	1 x 2	1 x 1/4	24 lbs.
4-1/2 gallons	1 x 4	1 x 1/2	48 lbs.

*approximate shipping weight

INSTALLATION GUIDELINES

Preparation: Surface must be properly prepared and if required, primed. Consult **POLYMERICA** Bulletin SP-C for details.

Mixing: Observe all precautions on MSDS and label when using this product. Premix Part A with a low-speed drill for at least two (2) minutes, then mix 8A : 1B by volume for an additional five minutes. Be sure to scrape sides and bottom of container while mixing.

Application: Apply by roller, brush, squeegee, or notched trowel. Back roll with a spiked or "porcupine" roller to reduce trapped air. Two coats are recommended for a pinhole-free membrane. **PEM** is not intended to be used as a wear surface.

Cure: Re-coat in 16 hours at 70°F. Foot traffic in 16 - 24 hours. Full chemical cure in 7 days.

Clean-Up: Clean skin with soap and water. Use MEK or proprietary epoxy thinners for equipment.

PHYSICAL PROPERTIES

Composition:	Two-component amine-cured epoxy urea
Color:	Pearl Grey*
Gloss: 60°:	100
Weight/gallon:	11.09 lbs., mixed
Solids Content:	100%
Mix Ratio:	2A : 1B by volume
Pot Life:	20 min. @ 70°F (3-gallon kit)
Viscosity:	1,000 cps. mixed approx.

*custom colors or other MasterShield colors available with restrictions

PERFORMANCE PROPERTIES

Cure	7 days @ 73°F
Tensile Strength: (ASTM D-638)	@ 45°F 252 psi. @ 73°F 225 psi. @ 140°F 134 psi.
Elongation (ASTM D-638)	@ 45°F 248% @ 73°F 214% @ 140°F 216%
Adhesion: (ASTM D-4541)	213 psi.
Tear Strength	80 pli.
Thermal Compatibility (ASTM C-884)	no delamination
Hardness(ASTM D-2240)	45 - 55 Shore A
Water Absorption	0.7% maximum
Service Temperature:	-40°F to 200°F (atmosphere)

SAFETY

Material Safety Data Sheets are available from **POLYMERICA** and should be consulted prior to use of the product. This product is intended for use by professionals only. Keep away from children and those not trained in the use and potential hazards involved.

MasterProof PEM is a two-component epoxy system. Part A contains epoxy resins and urethane prepolymer. Part B contains amines. Workers should wear gloves and goggles when mixing or applying product. Clean up with soap and warm water. Be sure to follow all label and MSDS cautions.

For additional information, visit our web site:

www.polymerica.com

Or e-mail us at - info@polymerica.com

CHEMICAL RESISTANCE

Reagent	Rating
Acetic Acid 5%	L
Acetone	L
Bleach	L
Citric Acid-5%	R
Crude Oil	R
Diesel Fuel	L
Ethylene Glycol	L
Fatty Acids	R
Gasoline	L
Hydrochloric Acid-10%	R
Lactic Acid-5%	R
Methyl Ethyl Ketone	L
Nitric Acid-1%	R
Skydrol	L
Sodium Hydroxide-20%	R
Sulphuric Acid-20%	R
Toluene	L
Urea-50%	R
Vinegar	L
Xylene	L

R - Recommended for continuous service

L - Limited recommendation, occasional spills

This chart is intended as an aid in evaluating the performance of these systems in various chemical exposures at 75°F. The data is intended as a guide only. In severe or combination exposures, a sample should be tested under actual or simulated use conditions.

Product data is revised as needed to reflect the most recent technology and field experience. Consult **POLYMERICA** for current printing date of literature.

WARRANTY

POLYMERICA warrants its products to conform to its manufacturing standards. **POLYMERICA** will replace or refund the purchase price of non-conforming products at the seller's option; such remedy being exclusive of all others and sole remedy available to the buyer. Buyer hereby expressly waives claim to additional damages. Any claim under this warranty must be made in writing within 7 days of discovery of noncompliance and no later than one year from the date of delivery of product. No representative, distributor or applicator of these products is authorized to modify product data or warranty.

IMPORTANT NOTICE

These products are sold subject only to the express warranties contained herein. There are no other warranties by **POLYMERICA** of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Buyer agrees that seller assumes no liability for remote or consequential damages of any kind which result from the use or misuse of this product. Information contained herein is based on data believed to be reliable, however, it is the Buyer's responsibility to satisfy itself of the suitability of the product for a particular purpose.

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