

Product Data Sheet

PRODUCT DESCRIPTION

Milamar's PM 180 Elastomeric Epoxy is a new generation of molecularly designed flexible epoxies. Unlike past formulations, **PM 180** will not become brittle with age. Its high tensile strength and superior elongation capabilities make it the ideal product as a stand-alone coating, crack filler or as an intermediate to reduce reflective cracking in rigid overlays from substrate movement.

It is available in clear and in colors. It is a 100% solids, zero VOC, multipurpose two component, epoxy with an easy to use one to one mix ratio. It can be applied with a glass smooth, high gloss finish as a membrane coating or it can be combined with various aggregates to obtain virtually any level of slip resistance required. This specially formulated epoxy has good chemical, excellent abrasion and impact resistance and good color stability.

TYPICAL USE

Versatile **PM 180** is most often used as a mechanical room floor coating/membrane, as a high strength joint filler, a pick resistant caulk in correctional facilities and as a reflective crack damper under more rigid overlays.

FEATURES

- State of the Art Formulation
- Variety of Uses - Coating, Membrane, Caulking
- Good Chemical Resistance
- Excellent Impact and Abrasion Resistance
- Very Good Crack Resistance
- Zero VOC - 100% Solids
- Plasticizer Free
- Easy to use - 1 to 1 Mix Ratio
- Long Pot Life

INSTALLATION

Substrate must be free of all contamination such as latence, curing compounds, dirt and oil. Concrete should be lightly shot blasted or acid etched and neutralized to a smooth, even finish similar in texture to 100 grit sand paper. Primers are necessary only when the substrate is porous. Cracks should be thoroughly cleaned and routed out to at least 1/2" at the surface and a depth of 1/2". On deep cracks or control joints, use a backer rod to set depth. **PM 180** epoxy develops adhesion properties stronger than concrete when substrate is properly prepared.

In a membrane coating or a crack damping application, **PM 180 Elastomeric Epoxy** is normally applied at a nominal 25 mils. Where a slip resistant finished floor is required, an additional coat with the appropriate aggregate can be pre-mixed with the A and B components or broadcast into the wet coating. (A decorative system can be achieved by broadcasting color quartz aggregate into clear PM-180). As a crack sealer or pick resistant caulk, the premixed parts "A" & "B" can be applied with any appropriate bulk caulk apparatus.

PACKAGING

PM 180 is normally packaged in 5 gallon pails. 55 gallon drums and one gallon cans are also available with minimum quantity restrictions.

CAUTION

PM 180 Epoxy System is intended for use by professional applicators. Although safe if properly handled, all personnel who are exposed to any chemical must read and completely understand precautions and warnings on label and MSDS/SDS prior to use.

STORAGE

For best shelf life, store **PM 180** epoxy in a dry area at temperatures between 50° F and 90° F. Protect product from freezing. Minimum shelf life is one year from date of manufacture when properly stored.

LIMITATIONS

Avoid on or below grade applications where water vapor transmission is greater than 4 lbs./1000 sq. ft. per 24 hrs. or

where ambient operating temperatures exceed 170° F. Apply at temperatures above 50° F or below 90° F.

COMPLIANCES

PM 180 is compliant with the State of California Air Resources Board approved architectural coatings volatile organic compound (VOC) rule, San Diego APCD Rule 67, New York City AQMD Rule 205, New Jersey VOC and USDA incidental contact requirements.

CHEMICAL RESISTANCE

PM 180 Epoxy is very resistant to most common industrial chemicals and solvents. An abbreviated list follows. For more comprehensive chemical resistance analysis, contact **Milamar Customer Service at 1-800-459-7659**.

REAGENT	30 MIN.	24 HRS.	7 DAYS
Acetone	F	F	F
Acetic Acid	D	F	F
Ammonium Hydroxide (28%)	NA	NA	NA
Clorox	NA	NA	D
Ethylene Glycol	NA	NA	NA
Gasoline	NA	NA	NA
Isopropyl Alcohol (98%)	NA	NA	NA
Mineral Spirits	NA	NA	NA
Nitric Acid (10%)	NA	D	F
Nitric Acid (70%)	F	F	F
Skydrol #500	NA	NA	NA
Sulfuric Acid (45%)	NA	D	F
Sulfuric Acid (90%)	F	F	F
Sodium Hydroxide (30%)	NA	NA	NA
Toluene	NA	F	F

N/A = NO ATTACK D = DISCOLORED F = FAILED

Physical Property	Test	Result
Hardness, Shore A	ASTM D-	70 @ 75° F
Water Absorption	ASTM C-413	0.010%
Flammability	MIL-D-	Fire Retardant
Indentation	MIL-D-	0.010"/0.00"
Elongation	ASTM D-638	80% & 150%*

*Two formulations are available

Actual test results may vary due to the use of various aggregates, application methods and floor finish. The foregoing test results are based upon laboratory prepared samples and results may vary if not prepared by a professional technician.

AVAILABILITY

Milamar products are available only through selected and approved applicators and distributors. This material is intended for commercial and industrial installations and should be installed by skilled, seamless flooring technicians. It is neither designed for nor available for consumer use.

Custom design assistance may be obtained by contacting **Milamar Customer Service at 1-800-459-7659** 8:00 AM through 4:00 PM Central time.

COLOR SELECTION

Standard colors are Clear, Gray and Dark Gray. Custom colors are available in 250 gallon minimums at additional charge.

CAUTION

COMPONENTS OF OR PRODUCTS USED WITH AND DURING THE INSTALLATION OF MILAMAR COATINGS PRODUCTS MAY INCLUDE HAZARDOUS MATERIALS. All personnel exposed to or handling materials before and during installation must read and fully understand label precautions and Material Safety Data Sheets.

LIMITED WARRANTY

Milamar Coatings products are manufactured to be free of defects in material and workmanship in meeting the properties specified on its individual Product Data Sheets. Users and installers of Milamar Coatings products are solely responsible for determining the suitability of the products for specific product applications. Milamar Coatings makes no Warranty or Guarantee, express or implied, including warranties of fitness, design compatibility or merchantability, for any particular use and shall have no responsibility or liability, including direct, indirect or consequential damages, due to injury, delay or third party claims for installation or repair. Likewise, Milamar Coatings

Physical Property	Test	Result
Compressive Strength	ASTM C-579	12,180 psi
Tensile Strength	ASTM D-638	3,386 psi
Flexural Strength	ASTM C-580	3,180 psi
Bond Strength	ASTM D-	> 300 psi
Linear Shrinkage	ASTM C-883	nil

assumes no liability of any nature for products that are adjusted in the field or that do not utilize all specified Milamar Coatings components. Should any Milamar Coatings product be proved to be defective within one year from the date of shipment, Milamar Coatings will, at its sole discretion, either replace the material; issue a credit to the customer's account; or provide a cash refund for the initial, paid purchase price of the material. Potential claims regarding product quality must be received in writing by Milamar Coatings within 30 days of the discovery of such

potential defect. This Warranty is exclusive of all other warranties, expressed or implied, and may only be adjusted in writing, signed by an officer of Milamar Coatings, L.L.C

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