



PM-500

CHEMICAL RESISTANT URETHANE

PRODUCT DATA SHEET

PRODUCT DESCRIPTION

PolyMax 500 Series Chemical Resistant Urethane Coating is an aliphatic, high build urethane, designed to be used where chemical, impact and abrasion resistance is paramount. It is virtually impervious to ultra violet attack and most common chemicals, including skydrol and brake fluid. The 500 Series urethane maintains its gloss level far longer than conventional coatings.

Varying levels of skid resistance can be obtained by adding slip resistant aggregate to the finish. When properly installed at 8 to 16 mils, it can out wear normal floor paints 10 times or more.

TYPICAL USE

Versatile **PM-500** is typically used as a heavy duty floor coating over primed concrete or as a gloss retentive finish coat for an epoxy mortar or broadcast floor.

Install **PM-500** in automotive repair shops, aircraft hangars, chemical processing areas, high traffic warehouses, loading docks, or as an extra durable finish on **PolyMax** seamless floors in commercial kitchens, customer waiting rooms, lockers or showers.

FEATURES

- Top Quality Formulation
- Long Wearing Gloss Finish
- Variety of Finished Textures
- Clear and Pigmented Versions
- Low VOC
- Excellent Gloss Retention
- Very Good Chemical Resistance
- Excellent Abrasion Resistance
- Excellent Ultra Violet Resistance

INSTALLATION

The performance of any floor coating is highly reliant upon proper preparation of the substrate. Substrate must be free of all contamination such as laitance, curing compounds, dirt, oil and grease. Concrete should be lightly shot blasted or acid etched and neutralized to a smooth, even finish, similar in texture to 100 grit sand paper. Prime area with **PolyMax** moisture tolerant epoxy primer. The **PM-500** urethane system develops adhesion stronger than concrete when substrate is properly prepared.

PM-500 coating is normally either rolled or squeegeed and back rolled. If a slip resistant finish is required, the appropriately sized aggregate can be pre-mixed with the A and B components or it may be broadcast into the previous coat and locked in with **PM-500** finish. **PM-500** can also be spray applied. (Contact **Tele-Tech at 1-800-459-7659** for assistance and equipment suggestions)

PACKAGING

PM-500 is normally packaged in 5 gallon pails. 55 gallon drums and one gallon cans are also available with minimum quantity restrictions by special order.

CAUTION

PM-500 Coating Systems are 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 prior to use.

STORAGE

For best shelf life, store **PM-500** 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 5 lbs./1000 sq. ft. per 24 hrs. or where ambient operating temperatures exceed 180° F. Ideal application temperatures are above 55° F or below 90° F. All open foods must be removed from area during installation. Adequate ventilation must be available during installation. Vehicles with rubber tires should not be parked on coating within 72 hours of installation.

COMPLIANCES

PM-500 urethane coating is compliant with most states volatile organic compound requirements but be sure to consult your states specific requirements before use. Lower and ZERO V.O.C. urethanes are also available from **PolyMax** where required.

CHEMICAL RESISTANCE

PM-500 Urethane is very resistant to most common industrial chemicals and solvents. An abbreviated list follows. For more comprehensive chemical resistance analysis, contact **Tele-Tech at 1-800-459-7659**.

REAGENT	30 MIN.	24 HRS.	7 DAYS
Acetone	N	N	F
Acetic Acid	N	D	F
Acetic Acid (20%)	N	N	N
Ammonium Hydroxide (30%)	N	N	N
Chlorine (5,000 ppm in water)	N	N	N
Citric Acid	N	N	N
Clorox	N	N	N
Ethylene Glycol	N	N	N
Gasoline	N	N	N
Hydrochloric Acid 32%	N	N	N
Isopropyl Alcohol (98%)	N	N	N
Mineral Spirits	N	N	N
Nitric Acid (10%)	N	N	N
Nitric Acid (40%)	N	N	N
Phenol	N	N	N
Skydrol #500	N	N	N
Sodium Chloride	N	N	N
Sodium Hydroxide (30%)	N	N	D
Sulfuric Acid (45%)	N	N	N
Toluene	N	N	N
Trisodium Phosphate	N	N	N

N = NO ATTACK D = DISCOLORED F = FAILED

Physical Property	Test	Result
Tensile Strength	ASTM D-638	5,300 psi
Flexural Strength	ASTM C-580	5,351 psi
Bond Strength	ASTM D-4541	> 300 psi
Linear Shrinkage	ASTM C-883	nil
Hardness	ASTM D-2240	72 @ 75° F
Water Absorption	ASTM C-413	0.009%
Flammability	MIL-D-3134F	Fire Retardant
Indentation	MIL-D-3134F	nil
Solids by volume		65%
Elongation	ASTM D-638	18%

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

PolyMax 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 **PM Tele-Tech at 1-800-459-7659** 8:00 AM through 4:00 PM Central time.

COLOR SELECTION

PM-500 is available in clear and pigmented versions. Standard colors are White, Gray, Dark Gray, Tile Red and Mocha. Custom colors are available in 250 gallon minimums at additional charge

CAUTION:

COMPONENTS OF OR PRODUCTS USED WITH AND DURING THE INSTALLATION OF POLYMAX COATING 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

POLYMAX COATINGS are manufactured to meet the highest level of consistency and quality for their intended use. All materials are warranted to meet the physical properties as listed above. Should any POLYMAX COATING be proven to be defective within one year of the date of shipment, the material will be either replaced or at our discretion, a credit for the full purchase price will be issued. The successful performance of seamless flooring is highly dependent upon many factors beyond our control. Therefore, except for such replacement or refund POLYMAX and it's affiliates MAKE NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS, DESIGN COMPATIBILITY OR MERCHANTABILITY, RESPECTING ITS COATINGS. Other than that stated in the foregoing, POLYMAX and its affiliates shall have no other responsibility or liability, including direct and/or indirect and/or consequential damages and/or damages from delay and/or damages to any third party with respect to the use of it's materials. Claims regarding product quality must be received in writing within 30 days of discovery of defect.

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