

Protect 3600 Primer

Epoxy Mortar Primer



7875 Bliss Parkway North Ridgeville, OH 44039
440-327-0015 440-353-0549 - FAX

DESCRIPTION:

Protect 3600 Binder is designed to be used as a primer for trowel applied epoxy mortar and slurry broadcast systems. It has exceptional wetting and bonding strength to concrete

ADVANTAGES:

- Extremely low odor
- Excellent impact and abrasion resistance
- Elevated chemical resistance
- Complies with VOC regulations for industrial maintenance coatings in the OTC and CA

STORAGE: Materials should be stored in un-opened containers between 65°F (18°C) and 90°F (32°C) and at or below 50% RH.

SHELF LIFE: 1 year from date of manufacture (un-opened).

PACKAGING KITS/ PART NUMBERS:

Volume Mix Ratio: 2A: 1B

Protect 3600 Binder Resin 159.00 gallons

PROTECT 3600-A/55 (2 ea.), 3600-B/55

Protect 3600 Binder Resin 15.00 gallons

PROTECT 3600-A/5 (2 ea.), 3600-B/5

LIMITATIONS:

Contamination and surface defects: If contaminants including oil, silicone, mold release agents and/or other materials are present, resin systems may fisheye or crawl away from the surface. All surface contaminants should be removed with a suitable detergent prior to application. Solvent cleaning of silicone based contaminants is NOT RECOMMENDED. Please contact PIP technical service for additional recommendations. **Protect 3600 Primer** will amber from UV exposure. Top coating with a pigmented aliphatic urethane is required if UV stability is needed.

MATERIAL PROPERTIES*:

Properties	Test Method	Results
Flash Point	ASTM D3278	≥215 °F (102°C)
Volume Solids (mixed)	ASTM D2369	100 %
Mixed Viscosity	ASTM D2196	600 cPs
Dry Time	ASTM D5895	Tack Free 6-10 hours Dry 24 hours Full Cure 7 days
VOC-Volatile Organic Compound	ASTM D3960	0 g/l clear & pigmented

CURED PROPERTIES*:

Properties	Test Method	Results
Compressive Strength	ASTM D695	11500 psi
Tensile Strength	ASTM C 307	2,100 psi
Adhesion to Concrete	ASTM D4541	350 psi concrete failure
Flexural Strength	ASTM D 790	4000 psi
Hardness (Shore D)	ASTM D 2240	90-95

*Properties and results are based on laboratory testing at 72°F (22°C) %50 RH, theoretical calculations and estimates. Typical properties, as stated, are to be considered as representative of current production and should not be treated as specifications.

CHEMICAL RESISTANCE*:

Protect 3600 Primer	1 Day	7 Days
ACIDS, INORGANIC		
10% Hydrochloric	E	E
30% Hydrochloric	F	P
10% Nitric	E	E
50% Phosphoric	G	F
37% Sulfuric	E	E
ACIDS, ORGANIC		
10% Acetic	G	F
10 % Citric	E	G
Oleic	E	E
ALKALIES		
10% Ammonium Hydroxide	E	E
50% Sodium Hydroxide	E	E
SOLVENTS		
Ethylene Glycol	G	G
Isopropanol	E	E
Methanol	P	P
d-Limonene	E	E
Jet Fuel	E	E
Gasoline	G	F
Mineral Spirits	E	E

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Xylene	E	G
Methylene Chloride	P	P
MEK	P	P
PMA	G	G
MISCELLANEOUS		
20% Ammonium Nitrate	E	E
Brake Fluid	E	E
Bleach	E	E
Motor Oil	E	E
Skydrol®500B	E	E
Skydrol®LD4	E	E
20% Sodium Chloride	E	E
10% TSP	E	E

*Based on spot testing of the clear coating after 14 days of cure. Pigmented versions may see reduced chemical resistance and staining.

Legend: E-Excellent (Not Effected)
G-Good (Limited Negative Effect)
F-Fair (Moderate Negative Effect)
P-Poor (Unsatisfactory)

INSPECTION AND APPLICATION:

Caution! Follow all precautions and instructions prior to installation.

SUBSTRATE: The substrate must be free of curing membranes, silicate surface hardener, paint, or sealer and be structurally sound. If you suspect concrete has been treated or sealed, proceed with complete removal process. Consult your PIP representative for further instruction if silicate hardeners or membranes have been utilized.

MOISTURE: This flooring system may be used if the concrete has a maximum moisture vapor transmission (MVT) of 3 pounds per 1000 sq. ft. over 24 hours using calcium chloride testing ASTM F1869 and a maximum internal relative humidity of 75% using ASTM F2170.

VAPOR/CONTAMINATION: Testing for MVT does not guarantee against future problems. If there is no known vapor barrier or the vapor barrier is inadequate, there is an elevated risk of bond failure. Other factors including the migration of oils, chemicals, excessive salts or Alkali Silica Reaction (ASR) from the concrete from may also elevate the risk of adhesion difficulties. Consult your PIP representative for approved mitigation treatments.

TEMPERATURE AND HUMIDITY: During the application and cure of the coating, the substrate temperature, material temperature and room conditions must be maintained between 65°F (18°C) and 90°F (32°C). Relative Humidity (RH) should be limited to 30-80%. DO NOT apply coatings unless the surface temperature is more than five degree over the dew point.

APPLICATION EQUIPMENT:

- Protective equipment and clothing as per SDS
- Jiffy® Mixer Blade model ES (for liquids only)
- Clean container for mixing material
- Low speed high torque drill motor
- High quality short nap roller covers- ¼-3/16" inch nap
- Application Squeegee

PREPARATION:

Surface dirt, grease, oil and contaminants must be removed by detergent scrubbing and rinsing with clean (clear) water.

Mechanical Preparation: Mechanical Preparation: Blasting or grinding the surface is the preferred method of preparation. The success of industrial diamond grinding as a concrete preparation method will vary depending on technique and the hardness of the concrete.

JOINTS: All non moving joints (control joints) can be filled with a rigid or semi-rigid joint compound. Construction joints may be filled with semi-rigid joint filler and might need to be re-built and re-cut depending on conditions. Isolation or expansion joints must be filled with a flexible material designed for expansion and should not be coated over.

RECOAT: Protect 3600 Primer can be coated with other PIP urethanes or epoxy coatings. The existing coating should be scrubbed with detergent and rinsed with clean water. Surface must be dry before coating. Existing coatings must be clean and sound prior to sanding with 100 grit sand paper or sanding screen to a uniform dulled surface. All sanding debris should be cleaned with a vacuum, damp mop.

APPLICATION:

MIX: Mix all components together for 2-3 minutes.

APPLY Protect 3600 Primer: with a squeegee and level material with a standard 3/8" nap roller. Coverage will greatly depend on porosity of concrete or existing substrate. Typical coverage over properly prepared concrete is 200 square feet per gallon.

CURING (DRYING): Epoxy mortar must be applied in wet or tacky primer for best results. If this is not possible, seed the wet primer with silica sand to provide a mechanical bond.

TECHNICAL SUPPORT: For application questions, please contact your salesman or PIP technical service at 440-327-0015.

READ SAFETY DATA SHEET (SDS) FOR SAFETY AND PRECAUTIONS. USE PRODUCT AS DIRECTED FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.

MAINTENANCE GUIDELINES:

Allow floor coating to cure at least one week before cleaning by mechanical means (IE: sweeper, scrubber, disc buffer).

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WARRANTY AND CONDITIONS OF USAGE

WARRANTY AND LIMITATION OF LIABILITY: Protective Industrial Polymers Inc. ("PIP") warrants that its products shall conform to the manufacturer's written specifications and shall be free from defects for one (1) year from the date of purchase. PIP MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES AND DISCLAIMS THE SAME, INCLUDING, WITHOUT LIMITATION, FAILURE OF THE PRODUCT DUE TO ACTS OF GOD, FLOODING, EXTREME OR ABNORMAL TEMPERATURES, HUMIDITY AND MOISTURE, STRUCTURAL CONDITIONS, SITE PREPARATION AND CONDITIONS, ACCIDENTS, DAMAGE CAUSED BY INSTALLATION OF MACHINERY, EQUIPMENT OR FIXTURES WITHOUT ADEQUATE FLOOR PROTECTION OR WITHOUT ADEQUATE TIME FOR CURING, FAILURE TO COMPLY WITH CONDITIONS OF USAGE (SPECIFIED BELOW), VANDALISM, NEGLIGENT OR INTENTIONAL ACTS OF THIRD PARTIES OR OTHER CASUALTIES. If any PIP product fails to conform to this warranty, PIP shall either replace the product at no cost to Buyer or refund the cost of the product, in PIP's sole discretion. Replacement of any product or a refund of the cost of any product shall be the sole and exclusive remedy available to buyer, and buyer shall have no claim for incidental, special or consequential damages, including, without limitation, business interruption damages. Any warranty claim must be made within one (1) year from the date of delivery of products. PIP does not authorize anyone on its behalf to make any written or oral statements which in any way alter PIP's warranty or installation and storage information or instructions in its product literature or on its packaging labels. Any installation of PIP products which fails to conform to such installation information or instructions or the "Conditions of Usage" (specified below) shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of PIP's products for the Buyer's intended purposes.

CONDITIONS OF USAGE: Installation of all products purchased must be by professional installers periodically published by PIP or otherwise approved by PIP in writing. Modification to any of PIP's products voids the warranty. The installer shall maintain a written contemporaneous record of field conditions (including, without limitation, surface and atmospheric conditions, usage rates, and lot numbers of products installed). PIP reserves the right of inspection of any installed product, installation and maintenance records and records of field conditions and may conduct additional testing as is reasonably required to investigate any warranty claims. Warranty shall only apply for products or materials that have been paid for in full. **Moisture Vapor Transmission (MVT) and ASR (Alkali Silica Reaction) Disclaimer and Exclusion:** Although rare, some floors at or below grade level are sometimes subjected to saturation by moisture from beneath the concrete floor slab. This moisture can travel through the concrete and collect between floor toppings creating the potential for delaminating from hydrostatic pressure and/or ASR. Conditions contributing to this include heavy rainfall, broken pipes, excess hydration within fresh concrete, and other factors or defective and old concrete. These factors are difficult, if not impossible to predict. PIP recommends testing for MVT and/or the presence of ASR in the concrete substrate prior to applying any polymer floor topping. The recommended test method for MVT is ASTM F 2170-11. ASR can be predicted by a higher than normal pH within the concrete. If high pH should be detected, it is recommended a lab test for ASR. If and when delamination of the floor occurs because of a moisture condition that exists beneath or in the concrete slab beyond the capacity of the individual product installed or failure of the concrete due to ASR, this Limited Warranty does not extend to such delaminating or topping failure. This writing constitutes the sole and only agreement of warranty relating to PIP products.