P-AU100: ALIPHATIC URETHANE

TECHNICAL DATA SHEET

DESCRIPTION

is a two-component abrasion, chemical and stain resistant, UV stable aliphatic polyester polyurethane finish coat. It is available in clear gloss, clear satin and can be pigmented. It is VOC Compliant in all states and provinces in North America. It cures to an inert, tough, impact, abrasionand chemical resistant finish coat. It is resistant to Skydrol, betadine and conventional hot-tire staining. Excellent adhesion to PurEpoxy's epoxy system. It requires a primer, Polyurethane-Acrylic Primer and Concrete Sealer, when it is applied to properly prepared concrete and cementitious overlays. It is used as an upgraded finish coat on PurEpoxy products and systems used in aircraft hangars, industrial kitchens, automotive showrooms and shop floors, commercial laboratories and research facilities, hospital and health care, wine and spirit processing and other facilities subjected to heavy foot traffic, fork lift traffic and chemical attack.

PRIMARY APPLICATIONS

- UV-stable top coat
- Aircraft hangar floors
- Production areas
- Maintenance facilities
- Warehouses

ADVANTAGES

- Long pot life
- Respectable odor
- Superior chemical resistance (compared to standard epoxy)
- Excellent chemical resistance
- Light stable and good gloss retention
- VOC complaint

TECHNICAL DATA

PACKAGING	1 US gal (4 L)
COVERAGE RATE	800 ft^2/gallon
RECOMMENDED THICKNESS	3.2 wet mils (81 microns)
MIX RATIO, BY VOLUME	A : B = 4 : 1 + 1lb aluminum oxide
DENSITY (KG/LITRE)	Part A: 1.14 / Part B:0.90 / Mixed: 1.09
POT LIFE	60 minutes @ 77°F (25°C)
SHELF LIFE	12 months in original unopened factory sealed containers. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards.
WORKING TIME	30 minutes
VOC	75.4 g/L

* The indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage. *
* Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.

PROPERTIES
@ 73°F (23°C) AND 50% R.H.

ABRASION RESISTANCE, ASTM D4060 (CS17/1000 CYCLES/ 1000 G)	18.8
COEFFICIENT OF FRICTION, ASTM D2047	0.60
TENSILE STRENGTH, PSI (MPA), ASTM D2370	6250 (43.092)
PERCENT ELONGATION, ASTM D2370	7

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SURFACE PREPARATION

Old concrete
Concrete surface must be cleaned. BLASTRAC, sand blasting, diamond grinder w/30 grit or coarse, or water blasting is highly recommended to remove surface contaminates. Any oils and fats must be removed prior to product application. Acid etching may be required (followed by a thorough rinsing) to open the pores of the concrete to accept a primer. Do not apply to wet substrates. Chloride, moisture, and pH levels should be checked prior to application.

New concrete
The concrete should be allowed to cure for a minimum of 30 days. Compression resistance of concrete must be at least 25 MPa (3625 lb/inch^2) after 28 days and traction resistance must be at least 1,5 MPa (218 lb/in^2). BLASTRAC, sand blasting, diamond grinder w/30 grit or coarser or acid etching (followed by a thorough rinsing) is required to remove the surface laitance that appeared during the curing process. A primer should be used to reduce out-gassing and promote adhesion.

MIXING
Materials should be pre-conditioned to a minimum of 50°F (10°C) prior to use. Thoroughly mix each component separately. Pour component B into component A using the proper mixing ratio of 4A:1B by volume. Mix both components for at least 1 minute using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. Add slowly the aluminum oxide. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture. Mix every 5-10 minutes to keep the aluminum oxide in suspension.

APPLICATION
APPLICATION : Primer coat
Apply the coating using a rubber squeegee and pass a roller to obtain a uniform coating. Apply evenly and avoid creating excess pools of material.

APPLICATION : Finish coat of P-AU100
Apply the finish coat of P-AU100 at a rate of 800 sq. ft. /gallon using a 3/8" (10mm) nap roller. Spread the material evenly with V-shaped cross passes. Apply evenly and avoid creating excess pools of material. Excess material could cause the floor to blister, especially in high humidity.

CLEANING
Clean all tools and materials with the cleaner/thinner for epoxies. Wash hands and skin carefully with warm soapy water. Once product has hardened, it may only be removed through mechanical means.

RESTRICTIONS

- Minimum/Maximum temperature of substrate: 50°F / 86°F (10°C / 30°C)
- Maximum relative humidity during application and curing: 40%
- Substrate temperature must be 5.5°F (3°C) above dew point measured
- Humidity content of substrate must be < 4 % when coating is applied
- Do not apply on porous surfaces where a transfer of humidity may occur during application
- The application of this coating on an interior or exterior substrate without a moisture barrier is at risk of detachment (by hydrostatic pressure).
- Protect from humidity, condensation and contact with water during the 48 hour initial curing period

HEALTH AND SAFETY

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse.

Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation.

Consult the material safety data sheet for further information.

IMPORTANT NOTICE

All statements, recommendations and technical information contained in this document are accurate to the best knowledge of PurEpoxy. The data relates only to the specific material designated herein. It may not be valid if used in combination with any other materials. It is the users' responsibility to verify suitability of this information for their own particular use, and to test this product before use. PurEpoxy assumes no legal responsibility for use upon these data. PurEpoxy assumes no legal responsibility for any direct, indirect, consequential, economic, or any other damage except to replace the product or refund the purchase price as set out in the purchase agreement.