

P-AU100 ULTRA: ALIPHATIC URETHANE ULTRA

TECHNICAL DATA SHEET

DESCRIPTION

P-AU100 ULTRA 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, abrasion and 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

- Aircraft Hangar and Maintenance Floors
- Automotive Show Room and Repair Floors
- Commercial Bakery and Kitchen Floors
- Hospital and Health Care Facility Floors
- Laboratory and Research Floors
- Manufacturing and Warehouse Floors
- Pharmaceutical Floors

ADVANTAGES

- Complies with USDA, FDA, Food Safety Modernization Act.
- Slip Resistance (ADA).
- LEED® and Green Seal® requirements.
- VOC and EPA Compliant in all states and provinces in North America. Cures to an inert finish.
- Strong and Tough Floor
- Excellent Chemical and Abrasion Resistance
- Designed for new concrete and for sealing old concrete

TECHNICAL DATA

PACKAGING	1.5 gal, 3 gal, 15 gal. (5.7 lt, 11.4 lt., 56.8 lt.)
COVERAGE RATE PER GALLON	<p>Clear Gloss and Pigmented Finish Coat: 300 to 350 sq. ft. (27.9 to 32.5 sq. m.) WFT 4.6 to 5.3 mils (0.12 to 0.13 mm)</p> <p>Clear Satin Finish Coat: 400 to 450 sq. ft. (37.2 to 41.8 sq. m.) WFT 4 to 3.6 mils (0.10 to 0.9 mm)</p>
RECOMMENDED THICKNESS	3.2 wet mils (81 microns)
MIX RATIO, BY VOLUME	A : B = 2 : 1
DENSITY	Mixed: 9.2 lb./ga
POT LIFE	45 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	<100 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)	0.03
WET DYNAMIC COEFFICIENT OF FRICTION, ASNI 326.3 Depends on texture of system selected, ranging from smooth or aggressive. Measured with BOT 3000E equipment.	>0.45 (inclines) >0.42 (level)
TENSILE STRENGTH, ASTM D882	7,500 psi
TENSILE ELONGATION, ASTM D882	10%

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SURFACE PREPARATION

Concrete must be structurally sound and free of curing agents, coatings, sealers, densifiers and other bond breakers.

Old concrete

If field tests or laboratory analysis reveals interior concrete flooring slabs containing contaminants from previously applied unreacted silicate materials that will interfere with the bond, PE-100-VRM

- Contaminants include, but are not limited to organic hydrocarbon materials, calcium chlorides and aluminum stearates.
- Concrete flooring slabs can lose their structural strength over time, caused by conditions beyond the control of the flooring manufacturer or the installation contractor.
- If the concrete substrate deteriorates sufficiently, it will no longer support the bond of the remediation floor system.

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/inch²) after 28 days and traction resistance must be at least 1,5 MPa (218 lb/in²). 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

For ease of mixing and placement, the temperature of the "A" and "B" components should be between 70°F to 80°F (20°C to 26°C). Pre-mix the "A" and "B" component to ensure all raw material and pigments are dispersed uniformly.

APPLICATION

After mixing all contents as instructed, immediately pour all liquid material on to the properly prepared concrete substrate or next lift in ribbons and squeegee the material out evenly. Back-roll and cross rolling of material. Check for desired wet film thickness with a WFT Gauge. If broadcasting aggregate, such as, 60 mesh or 90 mesh, broadcast a sprinkle (not full broadcast) into the wet material.

CLEANING

Clean-up mixing station, tools and equipment as required. Use acetone, a VOC exempt solvent, for cleaning up. Observe all legal, and health and safety precautions when handling or storing solvents and materials, particularly in confined spaces. Make sure the working areas are well ventilated at all times during placement and curing time.

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.