

PE-100 - Standard Clear Epoxy

DESCRIPTION

PurEpoxy PE-100 Standard Epoxy Clear is a very high solids, two-component, epoxy coating system. It exhibits excellent appearance, chemical resistance, and physical properties. Ideal for high-build coatings, as a binder for decorative quartz, vinyl flake, and metallic filled flooring. PurEpoxy PE-100 provides excellent adhesion to properly prepared substrates, and may be finished with a variety of top coats for increased wear and chemical resistance.

ADVANTAGES

- Durable, impervious, and easy to clean
- Low VOC, enables interior applications
- Tenacious bond to prepared concrete
- Resistant to common chemicals
- Virtually unlimited color, pattern and texture options

RECOMMENDED USES

- Manufacturing & Warehouse floors
- Shop Floors
- Residential
- Restaurants & Kitchens
- Institutional
- Retail Spaces

READY MIX		3 US gal (3x1)(11.35 L) or 15 US gal (3x5) (56.7 L)	
COLOR		PART A: CLEAR & 8 Standard Pre-Tints PART B: Clear	
RECOMMENDED THICKNESS ¹	PRIMER		TOPCOAT
SOLID COLOR	6 - 8 mils WFT (250 - 200 sq.ft./ga.)		10 - 12 mils WFT (160 - 135 sq.ft./ga.)
FLAKE SYSTEM	6 - 8 mils WFT (250 - 200 sq.ft./ga.)		10 - 14 mils WFT (160 - 115 sq.ft./ga.)
METALLIC SYSTEM	6 - 8 mils WFT (250 - 200 sq.ft./ga.)		10 - 16 mils WFT (160 - 100 sq.ft./ga.)
SHELF LIFE	12 months in original unopened factory sealed container. Keep away from extreme cold, heat, or moisture. Do not allow to freeze. ² Keep out of direct sunlight and away from fire hazards.		
MIX RATIO, BY VOLUME	A:B = 2A : 1B		
WORKING TIME³	~40 minutes @ 75°F (24°C) ²		
VOC	1.71 g/L		

¹ Substrate porosity and surface texture may increase coverage rates and mil thickness, and may require more material.

² Frozen material is unusable and cannot be recovered. Material that has frozen must be disposed of in an environmentally & legally responsible manner.

³ Working time is for distributed material. Higher temperatures or air movement may shorten working time. Keep finishing time to a minimum for best results. Material left in bucket will react very quickly. Follow application instructions.

PROPERTIES

@ 73°F (23°C) AND 50% RH.

SOLIDS CONTENT, BY VOLUME		100%	
RECOAT WINDOW	SUBSTRATE TEMPERATURE	MINIMUM	MAXIMUM
	> 68°F (20°C)	~6 hours	~24 hours
CURE TIME	SUBSTRATE TEMPERATURE	FOOT TRAFFIC	FULL CURE
	>68°F (20°C)	~24 hours	~5 - 7 days
SERVICE TEMPERATURE		-4°F to 122°F (-20°C to 50°C)	

Stated cure and recoat times are ~approximate and will be affected by changing temperature & humidity.
 Thinning not recommended

PHYSICAL PROPERTIES

BOND STRENGTH, ASTM D4541	>350 psi Failure of Concrete
WATER ABSORPTION %, ASTM D570	0.3
HARDNESS (SHORE D), ASTM D2240	85
TABER ABRASION ASTM D4060 (mg loss, 1000g per wheel, 1000cycles)	75
TENSILE STRENGTH (PSI), ASTM D638	5,500 psi
COMPRESSIVE STRENGTH (PSI) ASTM D695	14,000 psi
FLAMMABILITY	Liquid resin Class I, Non-flammable
ELONGATION, ASTM D638	6.7%
RESISTANCE TO MOLD GROWTH, ASTM D3273	Rated 10, (Highest Resistance)
RESISTANCE TO FUNGI GROWTH, ASTM G21	Rated 0, (No Growth)
VISCOSITY	A: 1300-2000 CPS B: 150-300 CPS

SURFACE PREPARATION

- Concrete substrates should be cured for a minimum of 30 days and have a min. compressive strength of 3,000 psi.
- Achieving optimal adhesion requires a clean, mechanically prepared substrate. Substrate must have minimum Concrete Surface Profile (CSP) of 3-4.
 - Refer to PurEpoxy Surface Preparation Guidelines SPG1

CONCRETE MOISTURE

- Note although moisture testing is critical it is not a guarantee against future moisture related problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and or you suspect there is concrete contamination from oils, chemical spills or excessive salts.
- A functioning vapor barrier is required.
- Perform a water droplet test in multiple places to make sure the slab is porous. (Per ASTM 3191).
- Open the pore structure in any nonporous areas and retest before installing.

MIXING

- Precondition all components for 24 hours to ambient temperatures.
- In clean mixing pail, mix entire unit, A & B. Units are premeasured for correct ratio, do not break down units, product performance will be effected.
- Mechanically mix only, do not mix by hand. Do not mix more material than can be distributed and applied in the working time window. Using a Jiffy/Jiffler, or similar type mixing attachment, slowly mix the components being careful not to introduce excessive air.
- Mix for 3 minutes. Ensure all material is scraped by side wall and bottom of mixing container. Apply material to floor immediately after mixing. Delay in distributing product will result in exothermic heat buildup in container.

APPLICATION

- The recommended application method is the use of non-marking rubber squeegee and roller application. Notched squeegees of the appropriate notch depth may be used for thicker applications.
- 18-inch rollers are recommended on larger area floors to reduce lap marks.
- Roller should have solvent-resistant phenolic core, high quality non-shedding fiber covers. Use 1/4-inch to 3/8-inch nap, depending on final finish and thickness desired.
- Quality brushes or wall-edgers may be used for cutting in margins.
- Distribute material evenly with non-marking (gray EPDM type, or similar) rubber flat squeegee.
- Apply even film at desired thickness.
- Roll material in two directions to achieve uniform film.
- Finish roll in one direction, typically at right angles to primary sight-line when entering room.

CLEAN UP

- Clean tools with appropriate solvent before curing.
- Cured material is very difficult to remove.
- Clean any spills and splashes before curing.

LIMITATIONS

Prior to application, measure, and confirm the ambient temperature and humidity conditions of air and substrate.

- Measure and confirm temperature of material. Precondition material for 24 hours prior to mixing.
- Do not allow material to freeze. Frozen material cannot be recovered and must be disposed of.
- Minimum/Maximum substrate temperature at application: 45°F (7.2°C) / 85°F (30°C).
- Maximum relative humidity during application and curing: 80%.
- Substrate must be 5°F (3°C) above dew point. Ensure conditions will not change during application and curing.
- Observe concrete moisture limitations stated in Concrete Moisture section.
- On porous, non-concrete substrates, ensure that there will be no moisture penetration on positive side.
- Protect from moisture and condensation for 24 hours after application.
- Do not apply to substrates exhibiting or tested positive for alkali silica reaction (ASR).
- Do not use propane or kerosene fueled heaters. Permanent discoloration of coating may occur.
- For professional use only by experienced personnel.
- **KEEP CONTAINER TIGHTLY CLOSED**

Prior to use of any product manufactured by APN Performance Coatings, its subsidiaries or affiliates, the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at <https://purepoxy.com/> or by calling **920-231-0850**.

HEATH & SAFETY

Read and fully understand all of these instructions before beginning mixing and application. Read and understand product SDS and other safety warnings.

Obtain and wear all required personal protection equipment (PPE.)

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.

WARRANTY STATEMENT

APN Performance Coatings Inc. warrants that products delivered to purchasers are manufactured free from material defects and workmanship flaws in accordance with APN Performance Coatings Inc. published specifications, provided installation follows APN Performance Coatings Inc. recommended procedures. APN Performance Coatings Inc. disclaims liability for any damages arising from improper product usage that deviates from its intended purpose or fails to comply with APN Performance Coatings Inc. installation standards. APN Performance Coatings Inc. assumes no liability regarding product installation and processing methods. This technical data information serves as general reference material only. Prior to any installation work, please reach out to your regional PurEpoxy Representative or contact our Technical Service team for professional guidance.

