PE-100 : STANDARD EPOXY CLEAR
TECHNICAL DATA SHEET

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
- Very low VOC, enables interior applications
- Tenacious bond to prepared concrete
- Very resistant to common chemicals
- Virtually unlimited color, pattern and texture options

PACKAGING	3 US gal (3x1) (11.35 L) or 15 US gal (3x5) (56.7 L)	
COLOR	PART A: CLEAR PART B: Clear to Amber	
RECOMMENDED THICKNESS[1]	**PRIMER**	**FINISH COAT**
SOLID COLOR	10 mils (150 ft²/gal)	16 mils(100 ft²/gal)
FLAKE SYSTEM	10 mils (150 ft²/gal)	13 mils(120 ft²/gal)
METALLIC SYSTEM	10 mils (150 ft²/gal)	40 mils(40 ft²/gal)
SHELF LIFE	12 months in original unopened factory sealed container. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards.	
MIX RATIO, BY VOLUME	A:B = 2A : 1B	
POT LIFE, 16 oz (500g) MASS	~10 - 15 minutes @ 77°F (25°C)	
WORKING TIME[2]	~40 minutes @ 75°F (24°C)[2]	
VOC	75.4 g/l	

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

[2] 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%			
THINNING	THINNING NOT RECOMMENDED			
WAITING TIME/RECOAT TIME	SUBSTRATE TEMPERATURE	MINIMUM		MAXIMUM
BEFORE APPLYING PE-100 OVER PRIMER	> 50°F (10°C)	~24 hours		~3 days
	> 68°F (20°C)	~12 hours		~2 days
	> 86°F (30°C)	~6 hours		~1 day
BEFORE APPLYING SECOND COAT OF PE-100	> 50°F (10°C)	~30 hours		~3 days
	> 68°F (20°C)	~24 hours		~2 days
	> 86°F (30°C)	~16 hours		~1 day
CURING TIME	SUBSTRATE TEMPERATURE	FOOT TRAFFIC	LIGHT TRAFFIC	FULL CURE
	>50°F (10°C)	~30 hours	~5 days	~10 days
	>50°F (10°C)	~24 hours	~3 days	~7 days
	>50°F (10°C)	~16 hours	~2 days	~5 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.

BOND STRENGTH, ASTM D4541	>350 psi Failure of Concrete
WATER ABSORPTION %, ASTM D570	0.3
HARDNESS (SHORE D), ASTM D2240	85
ABRASION RESISTANCE, ASTM D4060 CS17/1kg/1,000 cycles	0.1g
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)

SURFACE PREPARATION

Concrete substrates should be cured for a minimum of 30 days and have a minimum compressive strength of 3,000 psi Surfaces must be clean, sound and properly prepared. Suitable preparation methods are recirculating abrasive shot-blasting, diamond abrasive grinding. Remove all surface contamination before preparation. All soil, grease, oil or wax, or curing-agents must be removed.

Any preparation method should produce a uniform surface profile of CSP-3 (ICRI Guide 03732,)or greater. Acid etching of concrete is unacceptable and will void Manufacturer's warranty. *Continued, next page.*

SURFACE PREPARATION, cont.

Existing, well-adhered compatible coatings may be prepared by sanding or grinding to produce a uniformly open, gloss-free surface.

Do not apply to wet or damp substrates. Test for concrete moisture before application (see Concrete Moisture.)

Thoroughly vacuum prepared surface to remove all dust just prior to application. Protect prepared surface against contamination prior to application of product.

CONCRETE MOISTURE

Test for concrete moisture in accordance with ASTM F2170–19 (Wagner® RapidRH™ or similar.) If moisture is indicated to be in excess of 85%, apply PurEpoxy PE-VRM system in accordance with the published technical data sheet.

Alternately, test for excessive concrete moisture in accordance with ASTM F2659. Moisture content of concrete substrate must be ≤ 4 % by mass as measured with an impedance type (Tramex® CME/CMExpert) concrete moisture meter on prepared surface. Do not apply to concrete substrate with moisture levels > 4 %. If moisture content of concrete substrate is > 4 %, use **PurEpoxy PE-VRM** system in accordance with the published technical data sheet. Do not utilize resistance type moisture meters (Delmorst & similar).

MIXING

Precondition all components for 24 hours to ambient temperatures. In clean mixing pail, mix measured parts (2A : 1B). 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
- Minimum/Maximum substrate temperature at application: 45ºF (7.2ºC) / 85ºF (30ºC)
- Maximum relative humidity during application and curing : 80%
- Substrate must be 5ºF (3ºC) 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

HEALTH & 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.

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. Provide suitable ventilation.

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION

Prior to each use of any product manufactured by A.P Nonweiler/PurEpoxy, 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/documentations/ or by calling A.P Nonweiler. Nothing contained in any A.P Nonweiler/PureEpoxy literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each product as set forth in the current product label,

WARRANTY STATEMENT

AP Nonweiler/PurEpoxy ("we," "us," or "our") warrants this product for one year from the date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. No warranty shall be in effect until our Terms and Conditions of Sales are met in full. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL WE OR OUR AFFILIATES BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY NATURE, REGARDLESS OF THE FORM OF ACTION OR THEORY OF LAW, INCLUDING, WITHOUT LIMITATION, BREACH OF ANY OBLIGATION OR WARRANTY IMPOSED ON US HEREUNDER OR IN CONNECTION HEREWITH. AP Nonweiler/PurEpoxy SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. AP Nonweiler/PurEpoxy SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

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An **APN SPECIALTY COATINGS** Brand

A. P. Nonweiler Company, Inc.
3321 County Rd A,
Oshkosh, WI 54901
920.231.0850

PUREPOXY
4400 Chomedey W
Laval, QC CANADA H7R 6E9
Phone: (450) 818-0626

Email: info@purepoxy.com
Phone: (450) 818-0626

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Quality Management System Company