

## PP-S100 : HYBRID 100% SOLIDS HIGH PERFORMANCE POLYASPARTIC TECHNICAL DATA SHEET

### DESCRIPTION

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**PP-S100** is a two-component, 100% solid, polyaspartic coating system. It provides outstanding appearance, superior chemical, UV, solvent resistance, and excellent physical properties. **PP-S100** has tenacious bond strength direct to concrete allowing it to be used throughout a coating system. Its water-clear appearance and non-yellowing characteristics make it ideal for decorative vinyl flake, color quartz and metallic floor systems.

### ADVANTAGES

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- No odor
- Long working time (up to one hour.)
- Exceptional UV resistance
- Very flexible
- Fast drying in thin film
- Excellent chemical and stain resistance
- Contains no VOC solvents, allowing for interior applications
- Superior weathering and abrasion resistance

### USES

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- UV stable finish coat for many substrates
- Interior commercial & residential surfaces
- Aircraft hangars
- Maintenance facilities
- Offshore platforms
- Industrial shop floors
- Car washes & wash bays
- Primary & secondary containment
- Cooling towers
- Bridge decks
- Waste water treatment
- Low temperature equipment

## TECHNICAL DATA

<b>PACKAGING</b>	2.5 US gal (9.46 L) or 10 US gal (37.8 L)
<b>COLOR</b>	On Request
<b>RECOMMENDED THICKNESS<sup>1</sup></b>	Primer : 8 mils (200 ft <sup>2</sup> /gal) Finish Coat: - Over solid color : 6 mils (266 ft <sup>2</sup> /gal) - Over vinyl chips : 10 mils (160 ft <sup>2</sup> /gal)
<b>SHELF LIFE</b>	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.
<b>MIX RATIO, BY VOLUME</b>	A : B = 1.5 : 1 (Clear)
<b>POT LIFE, 16 oz (500g) MASS</b>	~15 minutes @ 77°F (25°C)
<b>WORKING TIME</b>	~40 minutes @ 75°F (25° C)*
<b>VOC</b>	0 g/l

\* May vary depending on humidity and air movement.

## PROPERTIES

@ 73°F (23°C) AND 50% RH.

<b>SOLIDS CONTENT, BY VOLUME (CLEAR)</b>	100%
<b>THINNING</b>	NONE - NOT RECOMMENDED
<b>CURE TIME<sup>2</sup></b>	Tack-Free : ~1 - 2 hours Recoat : ~2 hours Foot Traffic : ~2 - 4 hours Heavy traffic : ~24 hours Full Cure : ~4 - 7 days
<b>ABRASION RESISTANCE ASTM D4060 TABER CS17 WHEEL/1000g/1000 cycles</b>	4 mg loss
<b>ADHESION TO CONCRETE ASTM D4541</b>	>350 psi (Concrete Fails)
<b>WATER ABSORPTION, ASTM D570</b>	0.2%
<b>HARDNESS, SHORE D, ASTM D2240</b>	75 - 78
<b>FLEXIBILITY, 1/8" MANDREL, ASTM D1737</b>	Pass
<b>GLOSS, ASTM D523</b>	95+
<b>TENSILE STRENGTH, ASTM D638</b>	7,000 psi
<b>COMPRESSIVE, ASTM D695</b>	9,500 psi Quartz Filled : 13,700 psi Vinyl Flake Filled : 12,200 psi
<b>ELONGATION AT BREAK, ASTM D638</b>	100%

<sup>1</sup>Coverage rates are stated for smooth concrete. Rough or heavily prepared surfaces may require additional material.

<sup>2</sup>Stated curing times are approximate and depend on ambient conditions, temperature, and humidity. Higher temperatures and/or humidity will decrease working times.

## CHEMICAL RESISTANCE

CHEMICAL	RESULTS 77°F (25°C)
ACETIC ACID 100%	C
ACETONE	C
AMMONIUM HYDROXIDE 50%	RC
BENZENE	C
SATURATED BRINE	R
H <sub>2</sub> O CHLORINATED	R
HOUSEHOLD BLEACH 10%	R
DIESEL FUEL	RC
GASOLINE	RC
GASOLINE 5% MTBE	RC
GASOLINE 5% ETHANOL	RC
HYDROCHLORIC ACID 20%	R
HYDROCHLORIC ACID 10%	NR
HYDRAULIC FLUID	RC
ISOPROPYL ALCOHOL	R
LACTIC ACID	RC
MEK	RC
METHANOL	R
METHYLENE CHLORIDE	C
MINERAL SPIRITS	RC
MOTOR OIL	R
MTBE	C
MURIATIC ACID 10%	R

CHEMICAL	RESULTS 77°F (25°C)
SALT SOLUTION 10%	R
NITRIC ACID 20%	NR
PHOSPHORIC ACID 10%	R
PHOSPHORIC ACID 50%	NR
POTASSIUM HYDROXIDE 10%	R
POTASSIUM HYDROXIDE 20%	R, DIS
PROPYLENE CARBONATE	RC
SKYDROL	C
SODIUM HYDROXIDE 25%	R
SODIUM HYDROXIDE 50%	R, DIS
SODIUM HYPOCHLORITE 10%	R
SODIUM BICARBONATE	R
STEARIC ACID	R
SUGAR SOLUTION	R
SULFURIC ACID 10%	R
SULFURIC ACID >50%	RC
TOLUENE	R
1,1,1, TRICHLORETHANE	C
TRISODIUM PHOSPHATE	R
VINEGAR, 5%	R
WATER	R
WATER, 14 DAYS @ 180°F (82°C)	R
XYLENE	RC

R = Recommended/little or no visible damage

RC = Recommended conditional/some effect, swelling, or discoloration

C = Conditional, splash & occasional spill. Cracking, crazing may occur if not cleaned immediately.

NR = Not recommended for any exposure

DIS = Discoloration with any exposure

## SURFACE PREPARATION

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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.

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

Do not apply to wet 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 product application.

## CONCRETE MOISTURE

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Test for concrete moisture in accordance with ASTM F2170-19. 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  $\leq 4\%$  by mass as measured with a Tramex® CME/CMExpert type 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.

## MIXING

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Precondition all components for 24 hours to ambient temperatures. In clean mixing pail, mix measured parts. For clear mix, (1.5A : 1B). For pigmented system, (1A : 1B : 0.5 pigment). Mechanically mix only, do not mix by hand. Do not mix more material than can be 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.

Do not mix or apply product below ambient dew point, introduction of moisture will shorten pot life and working time.

## APPLICATION

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The recommended application method is the use of non-marking rubber squeegee and roller application. 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.

- Avoid puddles of material
- Do not apply above recommended thickness

## CLEAN UP

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

## LIMITATIONS

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- 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: 45°F (7.2°C) / 85°F (30°C)
- Maximum relative humidity during application and curing : 80%
- Extremely low relative humidity (<30%) will delay curing times
- 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

## HEALTH & SAFETY

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

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, Product Data Sheet and Safety Data Sheet prior to use of the A.P. Nonweiler/PurEpoxy product.

## 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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