



# AR-POLY 100

## POLYASPARTIC COATING

### PRODUCT DESCRIPTION

AR-POLY 100 is a very low VOC, two components polyurea system designed to maintain the integrity of various surfaces such as concrete, wood, metal etc. It exhibits excellent UV stability as well as good mechanical properties, good chemical and solvent resistance, while showing a very good aesthetic appearance.

### APPLICATIONS

POLY 100 is very suitable to protect:

- Industrial flooring,
- Bridges,
- Maintenance facilities,
- Aircraft hangar
- Flooring,
- Car washes
- Areas needing a resistant flooring topcoat.

### ADVANTAGES

- Very low odor
- Very low VOC
- UV stable
- Aesthetic finish
- Good chemical resistance
- Good mechanical properties
- Easy to clean, bacteria and moisture resistant surface

### PACKAGING

AR-POLY 100 is packaged in factory proportioned packaging for easy handling and mixing. Resin (A): 1 US Gallon  
Hardener (B): 1 US Gallon

### STORAGE

All PPI TECH INC components should be stored in dry, temperature-controlled areas between 12-28°C. Do not expose to freezing or excessive high heat

### TECHNICAL DATA @ 25°C

<b>% SOLIDS BY WEIGHT</b>	100%	<b>VOC CONTENT</b>	> 3 g/L
<b>POT LIFE 150G @ 25°C</b>	40-50 Minutes	<b>MIXING RATIO BY VOLUME</b>	1: 1
<b>WORKING TIME (23°C/12% RH)</b>	30-35 Minutes (8mils)	<b>MIXED VISCOSITY</b>	300-400 cps
<b>TACK FREE TIME (23°C/12% RH)</b>	3 Hours (8mils)		
<b>SUGGESTED # OF COATS</b>	1-2	<b>RECOAT TIME (MIN/MAX)</b>	4 Hours / 6 Hours
<b>FOOT TRAFFIC</b>	4-6 Hours	<b>LIGHT TRAFFIC</b>	24 hours
<b>FULL CURE</b>	7 Days	<b>SHELF LIFE</b>	12 Months unopened
<b>COMPRESSIVE STRENGTH ASTM D695</b>	9000-10000 psi	<b>BOND RESISTANCE ASTM D4541</b>	268 psi
<b>TENSILE STRENGTH ASTM D638</b>	7000-8000 psi	<b>HARDNESS (SHORE D) ASTM D2240</b>	70-75
<b>PERMEABILITY ASTM D570</b>	02%	<b>ELONGATION D638</b>	100%
<b>ABRASION RESISTANCE ASTM D4060</b>	0.10 g		

PRIOR TO USE APPLICATOR MUST ALWAYS READ AND FOLLOW WARNINGS AND INSTRUCTIONS ON PPI TECH INC. MOST UP TO DATE PRODUCT TECHNICAL DATA SHEETS, PRODUCT LABELS AND MATERIAL SAFETY DATA SHEETS WHICH ARE AVAILABLE UPON REQUEST BY CALLING TECHNICAL SUPPORT DEPARTMENT.

## **SURFACE PREPARATION**

Surface must be clean, sound and dry. Prior to coating a floor all trowel marks and surface imperfections must be removed to produce a smooth & uniform surface. Proper surface preparation is critical to ensure an adequate chemical bond to substrate. Substrate must be dry and free of all wax, grease, oils, fats, soil, contaminants, loose or foreign matter and laitance. Concrete should be cleaned and prepared using a shot blast machine or adequate grinding equipment to achieve a CSP-3 to CSP-4 profile as per ICRI guidelines. Compressive strength of concrete should be at least 3,500 psi (24 Mpa) @ 28 days and at least 215 psi (1.5 Mpa) in tension at time of product application.

**MIXING:** AR-POLY 100 is supplied in factory proportioned quantities, greatly reducing the risk of applicator error during mixing.

Step 1 - Mechanically premix PART A (resin) with an

appropriate slow speed drill equipped with a Jiffy Mixer, for 1 minute.

Step 2 - Slowly empty entire content of PART B into container holding PART A and continue to mix slowly for 3 minutes until uniform consistency in texture and color is achieved. Avoid unnecessary entrapment of air during mixing. Make sure to scrap e walls and bottom of container with straight edged trowel at least once to ensure homogeneous mix. Make sure to empty ALL contents of PART B into PART A to avoid system weakening or incomplete curing.

**DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED WITHIN WORKING TIME LIMITS.**

## **POT LIFE**

After mixing 150g, AR-POLY 100 has a pot life of approximately 40-50 minutes at 25°C. Pot life depends on ambient conditions.

## **APPLICATION**

AR-POLY 100 should be applied with a rubber squeegee and back rolled with a 10mm lint-free nap roller (on smooth surfaces) to remove squeegee lines and smooth out coating.

## **CURING**

AR-POLY 100 topcoat may be put back into service after 4-6 hours. Full product characteristics are achieved after 72 hours. Curing times dependent upon ambient & surface conditions.

## **PRECAUTIONS & LIMITATIONS**

Prior to application, measure and confirm Substrate Moisture Content, Ambient and Surface temperatures and Dew Point.

**Substrate Moisture:** Moisture within substrate must be  $\leq 4\%$  by mass as measured by Tramex® type concrete moisture meter on mechanically prepared surface.

**Dew Point:** AVOID CONDENSATION. The substrate must be at least 3°C above Dew Point to reduce risk of condensation. Condensation may lead to failure in adhesion. Avoid situations where substrate temperature is considerably lower than ambient temperature.

Do not add thinners or solvents to mix. Do not add water. Dispose of waste materials in accordance with government regulations. The use of safety glasses and protective gloves is required. In case of contact, flush areas with abundance of water for 20 minutes and seek medical assistance. Wash skin with soap and water. Use only in well ventilated areas.