



PPI Tech Inc  
2700 Cumberland St Ste 5  
Lebanon, PA 17042  
Office: (717)847-7604

# AR-Water Based Epoxy

## Technical Data Sheet

*AR- Water Based Epoxy is high gloss, penetrating surface sealer and primer. AR- Water Based Epoxy is easy to use and has a fast cure time. AR- Water-based epoxy is for all applications where concrete o requires waterproofing and protection.*

### Uses:

- Provides excellent bond to concrete
- Works as a primer
- Will work as a crystal-clear epoxy for interior application

## Application Data

|                          |                      |
|--------------------------|----------------------|
| <u>Mix Ratio</u>         | <u>2A:1B</u>         |
| <u>Application temp.</u> | <u>50 F° - 80 F°</u> |
| <u>Shelf Life</u>        | <u>12 months</u>     |
| <u>Pot Life</u>          | <u>1-1.5hrs</u>      |

### Advantages:

- Low viscosity
- Water Based
- Fast Cure time
- Low Odor

## Cure Time

|                      |                    |
|----------------------|--------------------|
| <u>Working time</u>  | <u>50-40 min</u>   |
| <u>Tack Free</u>     | <u>6- 12hours</u>  |
| <u>Recoat time</u>   | <u>12-18 hours</u> |
| <u>Full Cure</u>     | <u>5 days</u>      |
| <u>Foot Traffic</u>  | <u>24 hours</u>    |
| <u>Light Traffic</u> | <u>48 hours</u>    |

## APPLICATION INSTRUCTIONS

**SURFACE PREPARATION:** The concrete surface must be deemed mechanically and structurally sound, thoroughly clean of debris and completely dry. Concrete must be fully cured a minimum of 28 days. It is recommended to prepare the concrete surface by mechanical means such as shot blasting or diamond grinding with 30 grit or coarser diamonds to achieve a CSP-2 to CSP-3 profile. If using in a thin mil system such as acid stain, dye & seal, 2 or less clear coats, etc., an 80 grit diamond may be acceptable to minimize visual scratches in the finish. Vacuum concrete surface several times until dust thoroughly removed. If applying over an existing, fully bonded coating that is outside its recommended recoat window, the surface should be sanded thoroughly with a 60-120 grit sanding screen until the surface is completely dulled with scratches. Vacuum dust thoroughly, rinse with clean water and remove excess water with a wet/dry vacuum or floor scrubber. Allow surface to dry completely prior to application of coating. Where applicable and with adequate ventilation, wipe the surface with acetone and a microfiber dust mop. CAUTION: Acetone is extremely flammable! If using acetone follow all safety precautions, make sure no pilot lights, open flames, sources of static electricity, sparks or extreme heat sources are present. Use recommended personal protection for acetone.

If mechanical means of preparation are not suitable, it is recommended to prepare the surface with 4 parts water to 1 part muriatic acid. This preparation method is only suitable for completely un-sealed, bare concrete surfaces. Apply acid solution evenly on the surface using brushes, mops, brooms or an approved floor scrubber and keep wet on the surface of 10 - 15 minutes. Remove excess acid solution with a wet/dry vacuum or floor scrubber. Rinse surface thoroughly with clean water and on the final rinse use to neutralize the surface pH. Inspect the floor to ensure the surface has reached an even and adequate surface profile. Repeat the acid etch and neutralizing steps as necessary to achieve correct profile. Allow the floor to dry thoroughly for 24-72 hours prior to applying this product. ALWAYS use proper personal protective equipment when working with muriatic acid.

Substrate, air and material temperatures must be no less than 50°F and not exceed 80°F. If applied outside these limits the coating may not achieve adequate film formation and may have excessive air entrapment, bubbles, blushing or hazing. Please note that higher substrate, air and material temperatures as well as excessive humidity may speed the cure rate of this product. Cooler temperatures and lower humidity may slow the cure rate of this product.

FOR PERSONAL PROTECTION USE GLOVES, GOGGLES, RESPIRATOR AND OTHER NECESSARY PPE. REFER TO SDS PRIOR TO USE!

**TINTING:** Tint with AR color Pods (refer to TDS prior to use). 32 oz. per 2 gallon kit is suggested for a solid, opaque finish. Always add color to Part A and drill mix for 2-3 minutes prior to blending A and B. Color may settle during long term storage and be difficult to redistribute. Always test for color acceptance prior to full application. Multiple coats may be necessary for total opacity. Refer to physical AR Color chart for color selection.

**MIXING:** If mixing less than a full kit, mix Part A and Part B separately with a stir stick, low speed mixer or vigorously shake containers prior to measuring out the smaller kit to ensure uniform distribution of all ingredients. In a clean mixing container, blend 1 Part A and 1 Part B using a drill mixer for 2-3 minutes. Avoid creating a vortex in the material which could introduce air and/or moisture content to the mixture. Do not mix more than can be applied within the usable pot life time frame. DO NOT THIN!

### COVERAGE RATE:

First Coat - Direct to Concrete : 200 - 300 ft' per gallon•

Second Coat - Over Existing Coating: 250 - 350 ft' per gallon•

**APPLICATION:** Using a brush and/or 3/8" nap shedless roller, dip and roll the mixed material from a roller pan. 18" rollers are recommended for any surface to speed up application time and reduce roller marks. Start by placing the wet roller at one corner of an approximate 4' x 4' square and roll the material at an angle to opposite corner applying no pressure to the roller. Spread the material across only that square and immediately back-roll to even out material and roller lines. Adjust the size of your square as needed based on the amount of material being applied with the roller. After finishing the square, move on to the next square using the same technique. While applying keep a wet edge to prevent roller marks. It is recommended to work in sections usually using control joints as dividers to ensure proper application results. Apply the mixed material within the usable pot life time frame. If the material becomes thick while applying and sticking to the roller, stop applying and discard the mixed material. At this point it has reached the end of the usable pot life. Do not allow to puddle! Use a brush to remove excess coating in joints.

**RECOATING:** Note that for best results it is recommended to re-coat as soon as one can walk onto the surface without imprinting or making an impression on the surface, typically 4 - 6 hours. (This is especially true when re-coating with 100% solids epoxy.) If possible, recoat within the suggested recoat window located on page 1. Apply additional coats in the same manner as the first coat. Note that higher substrate, air and material temperatures as well as excessive humidity may greatly reduce the acceptable recoat window of this product. When working in higher temperatures, always recoat as early in the recoat window as possible to avoid failure between coats. If recoating outside the suggested recoat window (see page 1) or beyond 24 hours, sand using a 220 grit or coarser sanding screen to ensure adequate adhesion between coats. Vacuum dust thoroughly, rinse with clean water and remove excess water with a wet/dry vacuum or floor scrubber. Allow surface to dry completely prior to application of coating. Where applicable and with adequate ventilation, wipe the surface with acetone and a microfiber dust mop. CAUTION: Acetone is extremely flammable! If using acetone follow all safety precautions, make sure no pilot lights, open flames, sources of static electricity, sparks or extreme heat sources are present. Use recommended personal protection for acetone.

**PLEASE NOTE:** Applying material outside the suggested parameters may result in product failure. It is always recommended to test the product in a small, inconspicuous area (on the same concrete substrate) for desired results prior to application. Coverage rates may vary for all coatings and substrates depending on porosity, density, texture etc. When applying, adhere to suggested coverage rates. Applying too thin of a coating may cause inadequate film formation, limited performance expectations and/or undesirable finish. Applying too thick may result to bubbling, hazing, etc. DO NOT USE ON BRICK.

## FIRST AID

In case of contact with skin, wash thoroughly 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.

## CLEAN UP/STORAGE

Store in clean dry area. Do not freeze. Dispose in accordance with all state local and federal laws. Clean-up tools and equipment with xylene.

## PRODUCT REMOVAL

May be removed with a commercial stripper or by using a diamond grinding method, sandblasting or a mechanical action.

## IMPORTANT NOTICE

The recommendations and information contained in this document are based on reliable test results according to PPI. It is the responsibility of the user to validate the information therein and to test the product before using it. PPI assumes no legal responsibility for the results obtained in such cases. PPI assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages except to replace the product or to reimbursement the purchase price, as set out in the purchase contract.

## FOR PROFESSIONAL USE ONLY!!

This data sheet provides typical properties for American Resin products. Before using this product, the user is advised and cautioned to make their own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. Please consult our SDS for further safety information.

