

## UPC Acid Stain

### Product Description

UPC Acid Stain is a single-component, fast-drying reactive stain formulated to enhance various decorative concrete surfaces. Through the use of different application techniques, many unique translucent or mottled effects can be achieved. UPC Acid Stain is easy to use and can be quickly applied to almost any cementitious surface, including stamped concrete and vertical concrete surfaces. Advantages:

- Permanent Stain
- Penetrating
- 0 VOC
- Easy Application
- Interior or Exterior Use
- Wear-Resistant
- Breathable Finish
- Easy Care
- Low Cost
- Reduces Glare

### Applications

The uniqueness of its chemistry allows UPC Acid Stain to be used in many applications, including the following:

- Driveways
- Walkways
- Counter Tops
- Vertical Surfaces
- Shop Floors
- Patios
- Lobbies
- Stamped Concrete
- Garage Floors
- Rockscapes/Waterfalls

### Colors

UPC Acid Stain is available in the following standard colors. Colors can be combined to create customized results.

\*Liquid color in container does not reflect stain final color.

- Mission Brown
- Dark Almond
- Rustic
- Bronze
- Hunter Brown
- Terra Cotta
- Latte
- Espresso (Interior)
- Aqua Blue (Interior)
- Paradise Green (Interior)

### Packaging

UPC Acid Stain is available in two different sizes:

- 1/2 Gallon Unit
- 2 1/2 Gallon Unit

### Physical Properties

PROPERTY	VALUE	REFERENCE
Bond to Concrete	N/A	Penetrating
pH	< 4	
Thermal Shock	Good	ASTM D-1211
Flash Point/Flammability	N/A / 0	

### Product Data

Coverage:	200 SF/gal (1 <sup>st</sup> Coat Application)
	400 SF/gal (2 <sup>nd</sup> Coat Application)
Application temperature:	50-90°F
Thinning:	Optional with water (max. 50/50), to lighten colors and increase coverage
Cure time:	4-6 hours before neutralizing
Shelf Life	24 months

### Concrete Preparation

Before coating is applied, concrete must be:

- Cured – At least 28 days if new
- Dry – No puddled water
- Clean – Contaminants removed

For new, untreated concrete, very little preparation is required. Contaminants such as: curing agents, glue, sealers, waxes, paint, oil, dirt, water repellants, and anything that will prevent stain penetration must be removed. DO NOT use acid-based cleaners. If previous seal or coating has not been completely removed, surface is dirty, or concrete has aged for too long, the stain will not effectively penetrate the surface. Additional cleaning or other preparation may be required.

### Patching

The characteristics of stained concrete allow for the user to repair cracks and imperfections if desired. If repair is required, we recommend the use of cementitious, low-shrinking crack and spall filler. Note that these patches will be visible in the stain finish and the owner should be made aware of this.

### Testing

All surfaces are not the same. It is recommended that a mock-up of each color be done in an inconspicuous area to ensure color meets expectations. The test should be done on-site, using the proposed method by the assigned applicator to ensure penetration and effect. A record should be made of the technique(s) and amount of material used to establish coverage rates for the project.

### Mixing

1. Shake unopened container before use.
2. One-gallon to two-gallon acid resistant pump sprayers are suitable for application of UPC Acid Stain. Use non-metal equipment.
3. When mixing different stains together to create custom colors, a record of mix ratios should be made for reference.

- Note: Liquid color in its container does not reflect the stain's final color.
- Diluting UPC Acid Stain with equal part water (max. 50/50), will lighten the color and increase coverage.

## Application Instructions

UPC Acid Stain applications will vary with technique and skill level. The following instructions provide for the most basic application of UPC Acid Stain. The use of varying methods and techniques will result in unique effects in the final product. Please contact a UPC Technical Representative with questions regarding different methods of application.

- Be sure to carefully mask surrounding areas to avoid accidental staining.
- Tape off work areas to protect from foot traffic during application and drying.
- Wear protective gear. Read all safety precautions. Always use in a well-ventilated area.
- Use a non-metal, acid-rated sprayer. Begin spraying stain in a circular pattern while walking from left to right, then back, right to left. Work in small, manageable sections. Try working from control joint to control joint if possible. Do not allow stain to puddle, but keep a wet edge. Note: Avoid stepping in wet stain. Avoid dripping stain on concrete. Keep a drip rag on hand.
- Have another installer follow behind, scrubbing the stain well into the surface, using a medium bristle acid-rated nylon brush in a circular motion.
- The stain will foam for a few seconds as it reacts with concrete. Avoid tracking stain onto surrounding surfaces.
- Once the first coat is completely applied, a second coat can be applied evenly over the floor. No scrubbing necessary in this step.
- Allow stain to dry on the surface for at least 4-6 hours before cleaning residue.

## Clean-up of Stain Residue

### EQUIPMENT NEEDED:

- Good-quality wet/dry vacuum
- Mop and mop bucket with wringer
- Acid-rated nylon deck brush
- Floor scrubber machine with black or red pads
- Medium bristle broom
- pH tester to test surface for pH levels

UPC Acid Stain will dry and form a powdery white residue. This residue must be removed and neutralized. Use UPC neutralizing cleaner (refer to Product TDS for proper use) or water with ammonia (approx. 1 qt. ammonia dissolved in 5 gal. water) if Product is unavailable. Apply liberally to surface and scrub aggressively to remove residue, then rinse until the water is clean of all color. Continue process two to three times as necessary. Note: Avoid run-off

## (Cleanup continued)

to prevent staining of adjacent areas. Continue scrubbing surface. Wet-vacuum or mop all excess rinse water. Once the floor is dry, test the surface by wiping with a white cloth. If residue appears, repeat the rinse process until clean. A pH test of the surface, using a Litmus Strip or pencil pH test, is recommended before sealer is applied. A pH level of 7 or higher indicates that all acid has been neutralized.

## Maintenance

Maintain acid-stained floors by sweeping. When spills occur, clean immediately and rinse dirt from the floor with water. For heavily-soiled areas, use a damp mop and biodegradable cleaner or rotary floor machine equipped with a white or red buffing pad and mild commercial detergent. Repeat process until water rinses clean.

Many stained concrete floors are maintained by using wax or acrylic floor finishes. If any of these products are used, please refer to manufacturer's recommended method.

## Product Limitations

UPC Acid Stain is not effective on some surfaces. Concrete should be cured at least 28 days prior to application. UPC Acid Stain may have varying or little to no chemical reaction to older, weathered concrete; concrete subject to runoff/dripping water; heavily sand-blasted concrete; concrete that has been previously acid cleaned, etched, or stained which will reduce the ability of UPC Acid Stain to react properly; or tightly troweled surfaces, as the density of the surface may prevent the stain from penetrating and reacting. Always perform moisture vapor test to determine if the concrete is suitable for Acid Staining, and if rates of less than 5 Lbs per 1,000 SqFt per 24 Hrs are required based on a 72-hour test per Acid Stain TM F1869. If moisture vapor is present, a vapor emission cementitious system must be installed prior to applying UPC Acid Stain. This will ensure a successful application. UPC recommends testing samples on concrete to determine suitability of the stain and final appearance. Avoid using colors such as Aqua Blue, Paradise Green, and Espresso in areas subject to standing water. Applying to exterior concrete with exposure to excess water will darken the stained surface. These colors should only be considered for interior purposes.

## Warranty

Universal Polymer Coatings products are warranted for one year after date of application. Please refer to the UPC Limited Material warranty for additional clarification.

## Safety

Consult UPC Acid Stain material safety data sheet. Product contains acid, and is highly corrosive. Floor can be slippery when wet. Use safety goggles, rubber gloves and protective clothing when using this product. Perform work in a well-ventilated area, and use an OSHA/NIOSH approved respirator if necessary.