

# UPC 2500 Water-Based Epoxy

## Product Description

UPC 2500 Water-Based Epoxy is a two-component, 0-VOC premium water-based epoxy system. It can be used as a concrete base coat with color added, or an effective primer and sealer. Its chemistry provides excellent bonding characteristics and the toughness of conventional epoxies. Its design features provide for the highest industrial and commercial demands.

### Advantages:

- Easy to Install
- 0 VOC
- Self-Priming
- Extended Pot Life (1 Hr)
- Epoxy Toughness
- Wear Resistant
- Higher Moisture Tolerance
- High Color Stability
- Seamless Floor System
- Low Odor
- Easy Clean-up
- Apply over 15-day Concrete

## Applications

The versatility of its chemistry allows UPC 2500 Water-Based Epoxy to be used on any concrete surface, including the following:

- Garage Floors
- Warehouse Floors
- Aisle Ways
- Show Rooms
- Auto Service
- Dining Areas
- Grocery
- Retail Facilities
- Lobbies
- Schools and Hospitals

## Colors

UPC 2500 Water-Based Epoxy is available in Clear. UPC 2500 also can have pigment packs added to achieve a variety of colors. Contact UPC Sales Rep. for available colors.

\* Color "Clear" is white as a liquid but dries clear.

## Packaging

UPC 2500 Water-Based Epoxy is available in 3 different kit sizes:

	Part A	Part B
Unit 1 Kit	Pre-measured	Pre-measured
2.5 Gallon Kit	2 Gallons	1/2 Gallon
5 Gallon Bulk Kit	4 Gallons	1 Gallon

## Testing

All surfaces are not the same. It is recommended that a sample area be done before the start of the project. The test should be done on-site to insure proper adhesion and desired finish.

## Product Data

PROPERTY	VALUE	REFERENCE
V.O.C.	0 g/l	
Volume Solids	50%	
Bond to Concrete	350 psi.	
Pencil Hardness	F	
Gloss 60*	90	
Taber Abrasion	Loss/1000 Cycles =110 mg	ASTM D 4060 CS 17 Wheels
Direct Impact	40 in-lb.	
Reverse Impact	8 in-lb.	
Coefficient of Friction	0.6 minimum	ASTM D 2047

## Product Data

Coverage:	150-250 SF/gal as Base Coat 250-400 SF/gal as Primer/Sealer
Application temperature:	65-90°F and 5°F above dew point
Thinning:	Not required
Pot Life:	1+ hours
Working Time on Floor:	10-15 minutes
Cure time:	4-6 hours (Foot Traffic) 12 hours (Vehicle Traffic)
Critical recoat time:	18 hours
Shelf life:	12 months
USDA Food & Beverage:	Meets Requirements

## Concrete Preparation

Before coating is applied, concrete must be:

- Dry – No puddled water
- Clean – Contaminants removed
- Profiled – ICRI-CSP 2-3
- Sound – Cracks and spalled areas repaired and ground

Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting or diamond grinding are recommended to achieve ICRI-CSP (surface profile) 2-3.

## Patching

Void, cracks and imperfections will be seen in finished coating if the concrete is not patched correctly. Patch concrete with UPC Perfect Patch. After the patching material is cured, diamond grind patch.

## Mixing

The ratio of UPC 2500 Water-Based Epoxy is 4 to 1. That is, four parts A (resin) to one part B (hardener). Mix the following with a drill and mixing paddle. Note: Use a low speed drill (not to exceed 300 rpm) to prevent air entrapment.

1. The Unit 1 Kit allows the UPC 2500 Part A container to be used as the complete mixing container. Premix Part A for 30-45 seconds to achieve a uniform mixture.
2. Add entire contents of UPC 2500 Part B to Part A container and mix for 2-3 minutes.
3. If using the Bulk 5-Gallon Kit, premix UPC 2500 Part A for 30-45 seconds. This will also be the mixing container.
4. Add 1 gallon of UPC 2500 Part B to Part A container and mix for another 2-3 minutes.
5. Note: If using only a partial bulk kit, it is crucial to ratio the 4:1 material accurately in a clean mixing container, following mixing guidelines.

## Primer/Sealer Application Instructions

1. Tape off work areas to protect from foot traffic during application and drying.
2. Optimum ambient temperature should be between 65-90°F during application and 5°F above dew point.
3. Mix using the mixing instructions above.
4. In higher temperatures and dry environments, pre-wetting the concrete with a pump sprayer will extend working time and prevent flash-drying. Be sure to apply only enough clean water to dampen concrete, and avoid puddles.
5. Work in manageable sections. Try working from control joint to control joint if possible.
6. Apply approximately 250-400 SF per gallon as primer or 150-250 SF per Gallon as Base Coat, by pouring out on surface in a ribbon. Using a squeegee, pull material thin from wall to wall over substrate while covering surface evenly.
7. The second applicator, using spiked shoes and a chip brush, can now cut in corners and edge detail. Then, using a 9" x 3/8" non-shedding paint roller, roll coating forward and backward to further level the material.
8. Quickly back roll in the opposite direction, using a 18" x 3/8" paint roller from wall to wall to perfectly level and smooth surface.

## Clean-up

UPC 2500 Water-Based Epoxy, while in an un-reacted state, may be cleaned up with water and soap. Acetone may be needed once the resin begins hardening.

## Product Limitations

Ground level concrete slabs emit invisible moisture vapor. The allowable moisture emissions for concrete are 5 lbs. / 1,000 SF over a 24-hour period based on a Calcium Chloride test. Also, a Relative Humidity (RH) test can be performed to test for moisture vapor. RH testing results should be below 85% per ASTM F2170. If moisture is above this level, then blistering and de-lamination of coating may occur. A calcium chloride or Relative Humidity test should be performed to determine concrete moisture levels. If moisture levels exceed the 85% for RH test or 5lbs. for Calcium Chloride, then a concrete moisture vapor control system should be used first before applying coating system. Recommended system for cases of moisture above acceptable levels is UPC 5200. UPC 5200 Moisture Lock passes F3010 spec based on E96 testing results. Please contact UPC representative for additional details.

Coating systems are susceptible to cracking if the concrete moves or separates below the coating. Hence, joint and crack treatment should be reviewed prior to coating application. As a general rule, control joints (saw cuts) and random cracks should be saw-cut or chased first then filled with UPC 777 Perfect Patch. Construction/cold joints (two slabs which meet and hence move) should be treated. After the coating has been applied and cured, saw cut through the coating over construction joints and apply an elastomeric caulking.

## Warranty

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

## Safety

Consult UPC 2500 Water-Based Epoxy Safety Data Sheet. Avoid contact with skin. Some individuals may be allergic to epoxy resin. Protective eyewear, gloves and clothing are recommended.