

UPC 2700 2K-WB Urethane Gloss

Product Description

UPC 2700 2K-WB Urethane is a two-component, Low-VOC premium aliphatic water-based polyurethane. This new generation polyurethane system allows for UV resistance with high gloss retention and no solvent smells. This system boasts easy installation, long pot life, as well as great abrasion and chemical resistance which allows for both indoor and outdoor uses. *This product is also available in a matte finish UPC 2701 2K-WB Urethane.*

Advantages:

- Non- Yellowing
- Low VOC
- Low Odor
- High Gloss Retention
- Chemical Resistance
- High Color Stability
- Seamless Floor System
- Easy Installation
- Both Interior / Exterior
- Apply over 15-day concrete

Applications

The versatility of its chemistry allows UPC 2700 2K-WB Urethane to be used on any concrete surface, including the following:

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

Colors

UPC 2700 2K-WB Urethane is available in Clear.

*** Custom Color Fan Deck is available upon request**

Packaging

UPC 2700 2K-WB Urethane is available in

	Part A	Part B
Unit 1 Kit	Pre-measured	Pre-measured
4 Gallon Bulk Kit	3 Gallons	1 Gallon

Chemical Resistance: 24 Hour Spot Test

PROPERTY	VALUE
Gasoline	No Effect
MEK - Methyl Ethyl Ketone	No Effect
Diesel Fuel	No Effect
Coolant	No Effect
Brake Fluid	Slight Dulling
Transmission Fluid	Slight Dulling
Mineral Spirits	No Effect
Power Steering Fluid	Slight Dulling
5% Sulfuric Acid	No Effect
5% Hydrochloric Acid	No Effect
5% Nitric Acid	No Effect
5% Sodium Hydroxide	No Effect
5% Ammonia	No Effect

Physical Characteristic

PROPERTY	VALUE	REFERENCE
V.O.C.	<50 g/l	ASTM D-2369-81
Volume Solids	54%	ASTM D-2697
Bond to Concrete	350 psi.	ASTM D-4541
Pencil Hardness	3H	ASTM D-3363
Gloss 60°	90	ASTM D-823
Taber Abrasion	Loss/1000 Cycles	ASTM D 4060
	=44.9 mg	CS 17 Wheels
Flexibility	PASS	
Flash Point	<365 F	

Product Data

Volumetric Ratio:	3 to 1
Coverage:	200-400 SF/gal Smooth Surface 200-300 SF/gal Textured Surface
Application temperature:	65-90°F and 5°F above dew point
Thinning:	Not required
Pot Life:	30 minutes
Working Time on Floor:	10-15 minutes
Cure time:	10-12 hours (Foot Traffic) 48 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

voids, 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.

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.

Mixing

The ratio of UPC 2700 2K-WB Urethane is 3 to 1. That is, three 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 2700 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 2700 Part B to Part A container and mix for 3 minutes. Mix using the mixing instructions above.
3. If using the Bulk 4-Gallon Kit, premix UPC 2700 Part A for 30-45 seconds. This will also be the mixing container.
4. Add 1 gallon of UPC 2700 Part B to Part A container and mix for another 3 minutes.
5. Note: If using only a partial bulk kit, it is crucial to ratio the 3:1 material accurately in a clean mixing container, following mixing guidelines.

Top Coat Over Decorative Chip

UPC 2700 2K-WB Urethane can be installed as a top coat over decorative chip when non-yellowing, low smell, and high chemical resistance is required. 2 coats is required.

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. Work in manageable sections. Try working from control joint to control joint if possible.
5. Apply approximately 200-250 SF per gallon by pouring out on surface in a ribbon. Using a squeegee, pull material from wall to wall over substrate while covering surface evenly. ***Take care not to puddle or apply over 170 SF or 10 mils as product can turn white or foam if installed too thick.**
6. 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.
7. Quickly back roll in the opposite direction, using a 9" or 18" x 3/8" paint roller from wall to wall to perfectly level and smooth surface.
8. Make sure to always CAUTION tape finished work areas; asking all other trades to stay off for 24-hours.

Top Coat / Sealer Application Instructions

To apply UPC 2700 2K-WB Urethane as a top coat or sealer, begin with application instruction steps 1-5 for top coat over decorative chip.

1. Apply approximately 200-350 SF per gallon by pouring out on surface in a ribbon. Using a squeegee, pull material as thin as possible from wall to wall over substrate while covering surface evenly.

2. 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.
3. Quickly back roll in the opposite direction, using a 9" or 18" x 3/8" paint roller from wall to wall to perfectly level and smooth surface.
4. In high traffic areas a second coat may be recommended to increase mil thickness.

Clean-up

UPC 2700 2K-WB Urethane, 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 3 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 3 lbs. 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 Perfect Patch or similar approved hard epoxy product. 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 Material warranty for additional clarification.

Safety

Consult UPC 2700 2K-WB Urethane safety data sheet. Avoid contact with skin. Some individuals may be allergic to polyisocyanates. Protective eyewear, gloves and clothing are recommended.