

## UPC 2701 2K-WB Urethane Matte

### Product Description

UPC 2701 2K-WB Urethane is a two-component, Low-VOC premium aliphatic water-based Matte polyurethane. This new generation polyurethane system allows for UV resistance 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 gloss finish UPC 2700 2K-WB Urethane.*

#### Advantages:

- Non- Yellowing
- Low VOC
- Low Odor
- Both Interior / Exterior
- Chemical Resistance
- Extreme matte finish possible
- Seamless Floor System
- Easy Installation
- Apply over 15-day concrete

### Applications

The versatility of its chemistry allows UPC 2701 2K-WB Urethane Matte 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 2701 2K-WB Urethane Matte is available in Clear only.

### Packaging

UPC 2701 2K-WB Urethane Matte is available in the following sizes:

|                          | Part A       | Part B       |
|--------------------------|--------------|--------------|
| <b>Unit 1 Kit</b>        | Pre-measured | Pre-measured |
| <b>2 Gallon Kit</b>      | 1.5 Gallons  | 0.5 Gallon   |
| <b>4 Gallon Bulk Kit</b> | 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      |

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### Physical Characteristic

| PROPERTY         | VALUE            | REFERENCE      |
|------------------|------------------|----------------|
| V.O.C.           | >50 g/l          | ASTM D-2369-81 |
| Volume Solids    | 57%              | 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:        | 3:1  |
| Coverage:                | 300-400 SF/gal Smooth Surface<br>250-300 SF/gal Textured Surface |
| Application temperature: | 65-90°F and 5°F above dew point                                  |
| Thinning:                | Not required   |
| Pot Life:                | 45 minutes   |
| Working Time on Floor:   | 10-15 minutes  |
| Cure time:               | 6-8 hours (Foot Traffic)<br>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 777 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 2701 2K-WB Urethane Matte 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 2701 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 2701 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 2701 Part A for 30-45 seconds. This will also be the mixing container.
4. Add 1 gallon of UPC 2701 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 2701 2K-WB Urethane Matte is generally installed as a final top coat over a coat of 2700 2K-WB Gloss that is used to first seal the decorative chip epoxy coat.

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 300-400 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 10-12 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 at least 24-hours.

## Top Coat / Sealer Application Instructions

To apply UPC 27012K-WB Urethane Matte as a top coat or sealer, begin with application instruction steps 1-5 for top coat over decorative chip.

1. Apply approximately 250-350 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. (Use high Quality Paint roller to avoid roller lines)
4. Finally following the above steps, install a second coat within 18 hours of applying first coat.

## Clean-up

UPC 27012K-WB Urethane Matte, 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 27012K-WB Urethane Matte Safety Data Sheet. Avoid contact with skin. Some individuals may be allergic to polyisocyanates. Protective eyewear, gloves and clothing are recommended.