

# UPC 7005 Premium Polyaspartic

## Product Description

UPC 7005 Premium Polyaspartic is the next generation in two component, fast drying, polyaspartic ester. While other urethanes can only be applied between 2 and 3 mil, UPC 7005 can be applied in a single coat up to 11 mil. UPC 7005 features good abrasion and chemical resistance, and a cure time of six to eight hours. It can be installed in extremely high or low temperatures. UPC 7005 is the ideal product when low odor, fast turnaround and a non-yellowing system are essential.

### ADVANTAGES:

- Abrasion resistant
- Non-yellowing
- Chemically resistant
- 0 VOC
- Easy mixing Ratio (1:1)
- Flexible
- High Gloss Finish
- Great for Metallic Floors

## Applications

- Pharmaceutical
- Food Prep/Kitchens
- Garage Floors
- Restrooms
- Manufacturing plants
- Aisle ways
- Clean rooms
- Auto showrooms
- Schools
- Laboratories
- Basements
- Kennels
- Veterinary facilities
- Locker rooms
- Ramps
- Health Care facilities
- Loading docks
- Car wash facilities

## Colors

UPC 7005 Premium Polyaspartic is available as a clear base. A variety of pigment packs can be added at an additional charge. Please contact UPC Sales Representative for available colors.

## Packaging

UPC 7005 is available in four different kit sizes:

	Part A	Part B
1 Gallon Kit	1/2 gal.	1/2 gal.
2 Gallon Kit	1 gal.	1 gal.
3 Gallon Kit	1.5 gal.	1.5 gal.
10 Gallon Kit	5 gal.	5 gal.

## Concrete Preparation

Before coating is applied, concrete must be:

- Dry – No wet areas
- Clean – Contaminants removed
- Profiled – Surface etched
- Sound – All cracks and spalled areas repaired

Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting, diamond grinding, scarifying and scabbling are all acceptable methods.

## Physical Properties

PROPERTY	VALUE
Appearance	Clear Liquid
Total Solids (% by Weight)	85
Total Solids (% by Volume)	85
Surface Tension, Dynes/cm	40
Viscosity (Brookfield LVF), cps @ 25° C	600
Density (lbs/gallon)	8.32
Specific Gravity	1.0
Flash Point (C Pinsky-Martens closed cup)	<70
Freeze/Thaw Stability	N/A
Thermal Stability (28 days @ 52° C)	No Effect
Mechanical Stability	Good
VOC (g/l)	0
VOC (by Weight)	0
Tg (C)	66
Tensile Strength, psi	7000
Elongation	8%

## Film Properties

### PHYSICAL PERFORMANCE PROPERTIES OF DRY FILM

All tests were conducted on 2.0 to 2.5 mil films, and air-dried for seven days at room temperature.

PROPERTY	VALUE
Hardness (Pencil / Sword)	2H / 70
Taber Abrasion (mg loss per 1000 cycles, CS-17 wheel, 1000 load)	90
Impact Resistance (Direct / Reverse)	140 / 140 (lbs)
Crosshatch Adhesion (Untreated Cold Rolled Steel / Untreated Aluminum)	100% / 100%

## 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. If a non-UPC patching material is used, contact a UPC technical representative for a compatible and approved alternative.

## 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, using the proposed method by the assigned applicator to insure proper adhesion and color. A sample area should also be done on any existing coatings to determine if any contaminants exist or if delaminating will occur.

### CHEMICAL RESISTANCE: 7-DAY SUBMERSION

PROPERTY	VALUE
Brake Fluid	No Effect
Transmission Fluid	Slight Discoloration
Coolant	No Effect
Power Steering Fluid	Slight Discoloration
Battery Acid	Damaged
MEK	<200 Double Rubs
Acetone	<200 Double Rubs
Formula 409	<200 Double Rubs

### Product Data

Volumetric Ratio:	1 to 1
Coverage:	150-350 SF/Gal
Application temperature:	30-90°F
Thinning:	Not required
Pot life:	15-20 minutes
Working time on floor:	15-20 minutes
Cure time:	6-8 hours
Critical recoat time:	24 hours
Shelf life:	12 months
USDA Food & Beverage:	Meets requirements

### Application Instructions

1. Always apply in descending temperatures. Concrete is porous and traps air. In ascending temperatures (generally mornings) the air expands and can cause out gassing in the coating. It is safer to apply coatings in the late afternoon, especially for exterior applications.
2. Optimum ambient temperature should be between 65-90°F during application.
3. Mix UPC 7005 Premium Polyaspartic using mixing instructions found on this TDS.
4. Apply approximately 150-350 SF per gallon (150 SF per gallon for 11 mil and 350 SF for 4.5 mil) by immediately pouring out on surface in a ribbon, while walking and pouring at the same time until bucket is empty.
5. Using a squeegee on a pole, pull UPC 7005 over substrate while uniformly covering surface.
6. Using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards.
7. Lastly, back roll in the opposite direction as step 6.
8. For top coating over decorative poly chip system, 150-175 SF per Gallon of UPC 70005 Premium Polyaspartic is recommended.

### Mixing

The ratio of UPC 7005 Premium Polyaspartic is 1 to 1. That is, 1 part A (resin) to 1 part B (hardener). Generally, 2 mixed gallon of UPC 7005 is ideal for application. Mix the following with a drill and mixing paddle. Note: If using a drill mixer, use a low speed to prevent air entrapment.

1. Pour out 1 gallon of Part A into a clean bucket.
2. Add 1 gallon of Part B and mix for 2 minutes.

### Clean-up

UPC 7005 Premium Polyaspartic, while in an un-reacted state, may be cleaned up with water and degreaser. Isopropyl alcohol or acetone may be needed once the resin begins hardening. Lastly, a strong solvent like methylene chloride may be required if resin is nearly set up.

### 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 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 application. Please refer to the UPC Limited Material warranty for additional clarification.

### Safety

Consult UPC 7005 Premium Polyaspartic Safety Data Sheet. Avoid UPC 7005 contact with skin. Some individuals may be allergic to polyaspartic resin and isocyanate. Protective gloves, clothing, and mask are recommended.