

UPC 7001 Hybrid Standard Cure

Universal Polymer Coatings

Product Description

UPC 7001 (Standard Hybrid) is the next generation in two component, fast drying, polyaspartic ester. While other urethanes can only be applied between 2 and 3 mil, UPC 7001 can be applied in a single coat up to 8 mil. UPC 7001 features good abrasion and chemical resistance, and a cure time of two to four hours. It can be installed in extremely high or low temperatures. UPC 7001 is the ideal product when low odor, fast turnaround and a non-yellowing system are essential.

ADVANTAGES:

- Low odor
- Abrasion resistant
- Non-yellowing
- Chemically resistant
- Can be Installed over Wood, Concrete, and Metal
- 0 VOC
- Easy mixing ratio (1:1)
- Fast drying (2-4 hour cure)
- Flexible

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 7001 is available as a clear base. The following reactive pigment packs can be added at an additional charge:

- Medium Gray
- Black
- Camel Tan
- Forest Green
- White
- Gold
- Royal Blue
- Brick Red
- Sunflower Yellow

Packaging

UPC 7001 is available in three different kit sizes:

	Part A	Part B
2 Gallon Kit	1 gal.	1 gal.
4 Gallon Kit	2 gal.	2 gal.
10 Gallon Kit	5 gal.	5 gal.

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%

QUV WEATHEROMETER (ALCLAD ALUMINUM 1000 HRS.)

PROPERTY	VALUE
Oxidation	No Effect
Loss of Gloss	Slight
Blistering	No Effect
Yellowing	No Effect

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:	200 SF/Gal @ 8 mil
Application temperature:	30-90°F
Thinning:	Not required
Pot life:	15-20 minutes
Working time on floor:	15-20 minutes
Cure time:	2-4 hours
Critical recoat time:	24 hours
Shelf life:	12 months
USDA Food & Beverage:	Meets requirements

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.

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.

Mixing

The ratio of UPC 7001 is 1 to 1. That is, 1 part A (resin) to 1 part B (hardener). Generally, one mixed gallon of UPC 7001 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 1/2 gallon of Part A into a clean bucket.
2. Add 1/2 gallon of Part B and mix for 2 minutes.

Application Instructions

Certification is required. Please call Universal Polymer Coatings, Inc. to schedule training courses.

Clean-up

UPC 7001, 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. If moisture is above this level, then blistering and delamination of coating may occur. A calcium chloride test should be performed to determine concrete moisture level. If moisture levels exceed the 3 lb. limit, a concrete moisture vapor control system should be used first before applying coating system. Please contact the UPC technical department for approved systems.

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 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 7001 material safety data sheet. Avoid UPC 7001 contact with skin. Some individuals may be allergic to epoxy resin. Protective gloves and clothing are recommended.