

UPC 5200 Moisture Lock

Technical Data Sheet

Product Description

UPC 5200 Moisture Lock is a two-component 100% solids epoxy primer, formulated to exceed the ASTM F- 3010 requirements for MVB systems. This product stops water vapor transmission levels of up to 25lbs (ASTM F1869) and Relative Humidity levels up to 100% (ASTM F2170). UPC 5200 Moisture Lock is to be applied in one 12-16 mil coat. At 12 mil the coatings surpasses requirements with 0.94 Perm Rating and at 16 mil perm rating with 0.051 net perms. (Data from E96 Test performed by CTL Group).

Advantages:

- Passes & Exceeds ASTM F- 3010 Requiriements
- 0.051- 0.94 Permeability Rating
- Zero VOC
- Reduces or eliminates the effects of Moisture Vapor Emissions
- High Compressive Strength
- High Flexural and Tensile Strength
- Nonyl Phenol free

Applications

UPC 5200 Moisture Lock is compatible with the following flooring materials:

- Wood
- VCT
- Linoleum
- Ceramic tile
- Carpet
- Rubber EPDM
- Seamless Epoxy
- Cement

Colors

UPC 5200 Moisture Lock is available in **Clear** only.

Packaging

UPC 5200 Moisture Lock is available in three kit sizes:

	Part A	Part B
Unit 1 Kit	Pre-measured	Pre-measured
Bulk 3 Gallon Kit	2 Gallons	1 Gallon
Bulk 15 Gallon Kit	10 Gallons	5 Gallons

Physical Properties

PROPERTY	VALUE	REFERENCE
Bond to Concrete	350 psi Concrete fails at this point	ASTM D 4541
Taber Abrasion	75-80 Mgs	ASTM D 4060
Flammability	Self-extinguishing	
Hardness Shore D	76/81	@ 23 C 8hr/12hr
Tensile Elongation	2.6 @ Break (%)	ASTM D-638-08
Tensile Strength	10,024 PSI	ASTM D-638-14
Compressive Strength	13.548 PSI	ASTM D-695-08

Product Data

Volumetric Ratio:	2:1 Mix Ratio
Solids:	100%
Coverage:	130 SF @ 12 mil 100 SF @ 16 mil
Application Temperature:	55-85° F
Pot Life:	10-15 min at 75° F
Working Time on Floor:	20-30 minutes
Cure Time:	6-8 hours (foot traffic) 24 hours (equipment traffic)
Critical Recoat Time:	6-24 hours
Shelf Life:	12 months if stored properly; Do not freeze.

Concrete Preparation

Before coating is applied, concrete must be:

- Dry – No wet areas
- 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 as necessary.

Mixing

The ratio of UPC 5200 Moisture Lock is 2 to 1. That is, two parts A (resin) to one part B (hardener). Generally, three mixed gallons of UPC 5200 at a time is ideal for application. Mix the following with a drill and mixing paddle. Note: If using a drill mixer, use a low speed (not to exceed 300 rpm) to prevent air entrapment.

1. The Unit 1 kit allows the UPC 5200 Part A container to be used as the complete mixing container. Add entire contents of UPC 5200 pre-measured Part B and mix for 2-3 minutes.
2. If using the Bulk 15-Gallon Kit, premix UPC 5200 Part A for 30-45 seconds. Pour out 2 gallons into an empty 5-gallon bucket, which then becomes the mixing bucket.
3. Or If using 3-Gallon kit, Premix the 2 gallons Part A in its 3.5 Gallon pail.
4. Add 1 gallon of UPC 5200 Part B into the premixed 2 gallons of Part A and mix for another 2-3 minutes.
5. UPC 5200 is designed to be immediately poured on the floor. Leaving mixed product in the container will greatly reduce working time. Once poured out on the floor, 20-30 minutes of working time can generally be expected.

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 5200 Moisture Lock using above mixing instructions.
4. Apply approximately 100-130 SF per gallon (100 SF per gallon for 16 mil and 130 SF for 12 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 5200 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.

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 ensure proper adhesion.

Clean-up

UPC 5200 Moisture Lock, while in an un-reacted state, may be cleaned up with soap and water. Acetone may be needed once the resin begins hardening.

Product Limitations

- Interior use only
- UPC 5200 is not a waterproofing membrane and is not intended to stop liquid water intrusion through or into the slab.
- Not for use over any other substrates other than concrete slabs cured for a minimum of 10 days at 70°F

UPC 5200 Moisture Lock can be applied on green concrete that has had at least 10 days to cure. The surface to be coated with 5200 Moisture Lock must be free of moisture-sensitive patching and leveling materials, adhesives, coatings, curing compounds, concrete sealers, efflorescence, dust, grease, oils and any other materials or contaminants that can act as bond breakers.

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 and random cracks should be saw cut or chased first, then filled with UPC Perfect Patch. 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. UPC 5200 Moisture Lock can also come with an additional warranty per job. Please contact UPC Representative for additional information and how to obtain additional warranty coverage.

Safety

Consult UPC 5200 Moisture Lock Safety Data Sheet. Some individuals may be allergic to this coating. Use of safety goggles, protective gloves and clothing when using this product is recommended. Perform work in a well-ventilated area.