



## UI-7016-AL SERIES

### HIGH PERFORMANCE ALIPHATIC POLYURETHANE COATING

#### 1. PRODUCT

UI-7016-AL is a single component, liquid applied, moisture-curing, aliphatic polyurethane industrial maintenance coating. It can be used as the Top Coat for most of the polyurethane deck coating systems supplied by Urethane Polymers International, Inc. (UPI). UI-7016-AL is used in those areas where a moderate to low VOC, low solvent containing coating is required by regional EPA regulations.

#### 2. FEATURES

Single component application, vulcanized by moisture  
Non-yellowing with excellent weathering properties  
Excellent water resistance  
Rapid cure at room temperatures and can be accelerated for low temperature or low humidity cure  
High hiding with one coat application

#### 3. BENEFITS

Easy cost saving application  
Color stable aliphatic urethane backbone  
Eliminates migratory water problems  
Quick turn-around time with the use of UPI accelerators  
High Abrasion Resistance

#### 4. PRODUCT DESCRIPTION

**BASIC USES:** UI-7016-AL is the abrasion-resistance and weather resistant Top Coat used in most the UPI Traffic Bearing Coating Systems. Please refer to the pertinent Application-Specification Data Sheet on each of these systems.

UI-7016-AL is used where optimum weather resistance, abrasion resistance and color stability are required. It is used in conjunction with UI-7013, UI-7013-SC, UI-7014-HT, UI-7014-SC and UI-7016-AR Base Membranes and Intermediate Membranes. The cured top coat easily withstands the extreme environmental conditions encountered in exterior construction environments. When used in conjunction with elastomeric base membranes, the UI-7016-AL composite system contracts with lower temperatures and readily expands when temperatures increase. UI-7016-AL may also be used alone as an abrasion-resisting maintenance coating.

**LIMITATIONS:** Containers that have been opened must be used within one or two days, since the product is a moisture-reactive material that will gel or set up when exposed to moisture in the air. Keep lid tightly sealed when material is not in use.

**SHELF LIFE:** Twelve (12) months after manufacture when continuously stored indoors in unopened metal pails at temperatures under 80°F. Stir thoroughly prior to use.

**8 COLORS ARE STOCKED IN THE 250 VOC AND 100 VOC CONFIGURATIONS:** Pacific Gray, Sidewalk Gray, Rocky Gray, Monterey Sand, Ash Brown, Desert Tan, Brick Red and White. Custom Colors are available with a minimum order of 180 gallons. Contact our Order Desk for further information.

#### 5. INSTALLATION

**SURFACE PREPARATION:** All surfaces to be coated with UI-7016-AL must be thoroughly dry and free of all contaminants, including oxidation on old top coats or base coats as well as construction debris or deposits.

**APPLICATION:** UI-7016-AL is normally applied at a rate of 80-110 square feet per gallon, per coat, resulting in a film thickness of 15 to 20 wet mils. Coverage will vary depending on the aggregate size, texture or degree of surface porosity. The larger the aggregate used, the lower will be the coverage due to the greater surface area being covered. UI-7016-AL is easily applied by squeegee, roller, or notched trowel. Always follow by back-rolling. At 50% relative humidity and 77°F, the coating will be dry to a firm condition within 16 hours. Traffic should not be allowed on the finished coating for 24 hours. UI-9599 or UI-9801 Accelerators may be added to UI-7016-AL to allow for light traffic on decks within a matter of hours. Please refer to the Technical Bulletins on Accelerators or contact UPI.

#### 6. MAINTENANCE

If a UI-7016-AL coated surface is damaged, it can be repaired by light sanding or by scrubbing with a solution of TSP and water, followed by a thorough rinse with water. Follow this with a solvent wipe with xylene or Oxol-100 and UI-7113 penetrating cleaner. When the surface is dry, apply UI-7016-AL.

#### 7. AVAILABILITY

UI-7016-AL is supplied through select Construction Supply Distributors or ordered directly through your local Sales Representative in areas where no Distributorship is available. For the name of your nearest UPI Representative, please contact our office.

#### 8. PRECAUTIONS

Before using this product read the container precautionary label and the MSDS data sheet carefully. Exposure to urethanes or petroleum solvents may cause allergic skin or respiratory reaction. Do not get into eyes, onto skin, or clothing. If contact occurs, flush affected areas with soap and water. Wash clothing before reuse. Use only with adequate ventilation. Seek medical help for all-over exposures. **THIS PRODUCT IS FOR PROFESSIONAL USE ONLY.**

#### 9. TECHNICAL SERVICE

Technical Assistance is available by contacting:

**URETHANE POLYMERS INTERNATIONAL, INC.**  
**10880 Poplar Avenue**  
**Fontana, California 92337**  
**Phone: (909) 357-7200**  
**Fax: (909) 357-7215**  
**Email: info@urethanepolymers.com**

#### 10. LIMITED WARRANTY

Urethane Polymers International, Inc. (UPI) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any UPI materials prove to contain manufacturing defects that substantially affect their performance, UPI will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by UPI with respect to its materials. There are no other warranties, including the implied warranties of merchantability and fitness for a particular purpose. UPI specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever.

The dollar value of UPI's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the UPI material in question.

11. TECHNICAL DATA

**UI-7016-AL ALIPHATIC TOP COAT  
(TYPICAL VALUES)**

<i>PROPERTY</i>	<i>UI-7016-AL-SC (100 VOC)</i>	<i>UI-7016-AL-HS (250 VOC)</i>	<i>UI-7016-AL (340 VOC)</i>	<i>TEST METHOD</i>
Polymer Composition	Aliphatic Polyester Polyurethane	Aliphatic Polyester Polyurethane	Aliphatic Polyester Polyurethane	-----
Solids Content (By Weight)	82 +/- 2%	78 +/- 2%	75 +/- 2%	ASTM D-1353
VOC Content	100 grams/liter	250 grams/liter	340 grams liter	Calculated
Weight Per Gallon	10.3 ± 0.2 lbs.	9.7 ± 0.2 lbs.	9.5 ± 0.2 lbs	ASTM D-1475
Viscosity @ 77°F	25-35 poise	25-35 poise	25-35 poise	Brookfield
Cure Time @77°F, 50% R.H. @ 10 mils	24 hours	24 hours	24 hours	-----
Flash Point	Above 116°F	Above 116°F	Above 116°F	ASTM D-93
Tensile Strength	3300 ± 300 psi	3300 ± 300 psi	3300 ± 300 psi	ASTM D-412
Ultimate Elongation	225 ± 50%	225 ± 50%	225 ± 50%	ASTM D-412
Hardness, Shore A	90 ± 5	90 ± 5	90 ± 5	ASTM D-2240
Adhesion to Base Coat	30 pli	30 pli	30 pli	-----
Water Vapor Permeability	0.1 perms	0.1 perms	0.1 perms	ASTM E-96
Abrasion Resistance, Inch Loss	Less than .002	Less than .002	Less than .002	C-502 Tabor Abrasion, 1000 Rev, 1000 Gm. Weight, CS-17 Wheel
Water Absorption	Less than 1 %	Less than 1 %	Less than 1 %	ASTM D-543
Tear Strength	300 ± 50 lb./in.	350 ± 50 lb./in.	350 ± 50 lb./in.	ASTM D-1004
Chemical Resistance (Commonly encountered acids, salts, and oils)	Excellent	Excellent	Excellent	ASTM D-2299
Weathering Resistance	No Chalking @ 2000 hours	No Chalking @ 2000 hours	No Chalking @ 2000 hours	ASTM G-23
Service Temperature Range	-30 to + 180°F	-30 to + 180°F	-30 to + 180°F	-----
Thermal Shock	No loss of adhesion	No loss of adhesion	No loss of adhesion	Alternate Heat/Cold Cycle

UI-7016-AL Series (14)