



Atlas Minerals & Chemicals, Inc.



DATA SHEET

7-603PI (6-03²)
Supersedes 7-603PI (8-01)

UREKLAD® 210

DESCRIPTION

UREKLAD 210 is a polyurethane coating that may be used as a stand-alone coating for concrete or as a wear resistant topcoat for REZKLAD® Flooring Systems.

TYPICAL USES

UREKLAD 210 provides an excellent wear and scratch resistant topcoat for REZKLAD Flooring Systems. It can also be applied over concrete to reduce dusting and improve wearability. It reduces dirt pickup and improves cleanability. UREKLAD 210 offers UV-resistance and is recommended for outdoor applications. UREKLAD 210 is certifiable for use in USDA inspected facilities.

CHEMICAL RESISTANCE

UREKLAD 210 is resistant to many foodstuffs and organic and inorganic acids, alkalis and salts. Refer to the chemical resistance chart for specific information.

Note: ATLAS chemical resistance data is derived from testing in total immersion service.

AVAILABLE COLORS

UREKLAD 210 is available in clear only.

PACKAGING AND COVERAGE

UREKLAD 210

1-gal. can (7 lb. 14 oz. [3.6 kg.])

Coverage over smooth surface: Approx. 300 sq. ft. (27.9 m²) per unit @ 2 mils (0.05 mm.)

5-gal. pail (39 lb. 6 oz. [17.9 kg.])

Coverage over smooth surface: Approx. 1,500 sq. ft. (139 m²) per unit @ 2 mils (0.05 mm.)

REZKLAD E-CONCRETE PRIMER

When using UREKLAD 210 over concrete, the substrate should be primed with REZKLAD E-CONCRETE PRIMER to provide optimum adhesion.

1/2-Gallon Unit (3 lb. 7 oz. [1.6 kg.]) Consisting of:

One - 1/2-gal. can of Resin (2 lb. 8 oz. [1.1 kg.])

One - 1-pt. can of Hardener (15 oz. [425 g.])

Coverage: Approx. 100 sq. ft. (9.3 m²) per unit

1-1/2-Gal. Unit (12 lb. 2 oz. [5.5 kg.]) Consisting of:

One - 1-gal. can of Resin (9 lb. [4.1 kg.])

One - 1/2-gal. can of Hardener (3 lb. 2 oz. [1.4 kg.])

Coverage: Approx. 350 sq. ft. (32.5 m²) per unit

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
% Solids	ATM No. 14	39-43
Temperature Resistance Continual Intermittent		140°F (60°C) 170°F (77°C)
Abrasion Resistance, Taber CS-17 wh., 1 kg., 500 cyc.	ASTM C501	12 mg. weight loss

SURFACE PREPARATION

UREKLAD 210 can be applied to concrete surfaces or as a topcoat for REZKLAD Flooring Systems. The substrate must be structurally sound, clean and dry.

Concrete: Finished concrete must be free of ridges, protrusions, fins, mortar splatter and have a tight laitance-free steel trowel finish. Abrasive grit blasting or acid washing are recommended surface preparation methods. A finish similar to the profile of 100 to 120 grit sandpaper is suggested. The final appearance of the coated surface will be affected by the surface preparation method. Abrasive grit blasting will result in a pattern visible through the clear coating and may not be desired. Acid etching may produce a more visually appealing finish but will require a longer time period before coating can proceed.

When used with REZKLAD Flooring Systems, refer to appropriate Data Sheets. For additional information, refer to Surface Preparation, Data Sheet PS-30.

TEMPERATURE DURING APPLICATION

Store UREKLAD 210 at 70°F (21°C) to 80°F (27°C) for 24 hours prior to use. The best working characteristics of the materials will be attained when the temperature of the substrate, air and UREKLAD 210 are between 65°F (18°C) and 85°F (29°C). Do not apply when relative humidity is greater than 75%.

MIXING AND APPLICATION OF THE REZKLAD E-CONCRETE PRIMER

REZKLAD E-CONCRETE PRIMER is used only when UREKLAD 210 is applied to concrete substrates.

Mixing of the components should be done with a hand drill equipped with a "Jiffy" type mixer with a mixing speed between 300 and 500 RPM. During mixing, move the mixing blade in circular and up and down motions scraping all sides and the bottom of the mixing container.

- Combine the contents of the cans of REZKLAD E-CONCRETE PRIMER Resin and Hardener in

TYPICAL WORKING AND DRYING TIMES OF THE REZKLAD E-CONCRETE PRIMER

Temperature	Working Time	Minimum Drying Time	Maximum Drying Time
65°F (18°C)	35 min.	12 hours	48 hours
75°F (24°C)	25 min.	8 hours	48 hours
85°F (29°C)	15 min.	6 hours	24 hours

a suitable mixing container. Mix thoroughly for two minutes as described above.

- Apply REZKLAD E-CONCRETE PRIMER with a brush or roller making sure to work it into the pores of the concrete. Do not allow puddling.
- The primed surface should be tacky or dry before applying UREKLAD 210. If the primer is kept clean, it may be allowed to dry up to the maximum drying time. If the primer is allowed to dry for longer than the maximum drying time, the surface must be sanded and the area reprimed before proceeding.

MIXING OF THE UREKLAD 210

UREKLAD 210 is a one component product. Stir prior to application, moving the mixing blade in circular and up and down motions scraping all sides and the bottom of the mixing container.

APPLICATION OF THE UREKLAD 210

NOTE: ODORS FROM UNCURED UREKLAD 210 MAY CONTAMINATE CERTAIN FOOD, BEVERAGE AND PHARMACEUTICAL PRODUCTS. REMOVAL OF THESE PRODUCTS MAY BE NECESSARY DURING THE INSTALLATION AND CURE OF THE MATERIAL. EVACUATE ODORS TO EXTERIOR ENVIRONMENT AND RESTRICT ODORS FROM CIRCULATING THROUGHOUT THE BUILDING.

- Apply UREKLAD 210 in thin coats, 1 mil (0.03 mm.) to 3 mil (0.08 mm.), using a lambswool applicator. A short or medium nap paint roller may also be used but may result in bubbling of the coating surface.
- Allow the first coat to dry. Refer to the "Typical Drying and Recoat Times" chart for specific information.
- Apply a second coat. Allow to dry for the minimum drying time before allowing foot traffic. Allow to dry at least 72 hours before placing into full service and seven days for maximum chemical resistance.
- When used as a final topcoat on REZKLAD Flooring Systems, apply UREKLAD 210 within 24 hours of finishing the floor.

TYPICAL DRYING AND RECOAT TIMES OF THE UREKLAD 210

Temperature	Minimum Drying Time	Maximum Drying Time
65°F (18°C)	12 hours	24 hours
75°F (24°C)	5 hours	24 hours
85°F (29°C)	4 hours	24 hours

CLEANING OF TOOLS AND EQUIPMENT

Solvents, such as methyl ethyl ketone, toluene or xylene, will remove the materials referred to in this Data Sheet from mixing tools and equipment if cleaning is done immediately after use. Fully hardened material will have to be removed by mechanical means.

Dispose of residues and wastes in accordance with the directions in the Material Safety Data Sheets and government regulations.

STORAGE AND SHELF LIFE

Store all materials in a cool, dry environment. Keep all materials out of direct sunlight. Ideal storage temperature is 75°F (24°C). Protect from freezing. In unopened original containers, the materials referred to in this Data Sheet have a shelf life of approximately six months.

PRODUCT SPECIFICATION

The coating shall be UREKLAD 210 as manufactured by Atlas Minerals & Chemicals, Inc.

PRECAUTIONS

The materials referred to in this Data Sheet are for Industrial Use Only. They contain materials that present handling and potential health hazards. Consult Material Safety Data Sheets and the container labels for complete precautionary information.

TECHNICAL SERVICES

ATLAS maintains a staff of Technical Service Representatives who are available to assist you with the use of ATLAS products. In the event of difficulties with the application of ATLAS materials, the installation should be stopped immediately and ATLAS' Technical Service Department consulted for assistance.

WARRANTY

ATLAS warrants that its products will be free from defects in workmanship and materials under normal use for a period of one (1) year from the date of shipment by ATLAS (provided the products are installed before the expiration of the shelf life). THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR THE PURPOSE FOR THIS PRODUCT WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. ATLAS' LIABILITY FOR ALLEGED BREACH OF THIS WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT (BUT NOT INCLUDING REMOVAL OF THE DEFECTIVE PRODUCT OR INSTALLATION OF REPLACEMENT PRODUCTS). ATLAS SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES DURING THE WARRANTY PERIOD OR THEREAFTER. **ATLAS' WARRANTY IS VOIDED IF PAYMENT FOR PRODUCT IS NOT RECEIVED IN FULL.**

Note: Atlas makes it a practice to continuously update and enhance our CCM (Corrosion Resistant Construction Materials) products. This may result in slight discrepancies between our printed Data Sheets and the current version. For the most recent version of any Data Sheet, please visit our Web site at www.atlasmin.com

CHEMICAL RESISTANCE OF UREKLAD® 210 (7-603PI)

Acetic Acid, to 5%	E	Ethylene Glycol	E	Nitric Acid, to 10%	C	Tung Oil	F
Acetic Acid, 5% to 10%	G	Fatty Acids	F	Oleic Acid	G	Turpentine	G
Acetic Acid, 10% to 50%	C	Ferric Chloride, Nitrate, Sulfate	G	Olive Oil	G	Urea	E
Acetone	C	Fluosiilic Acid	C	Oxalic Acid	E	Urine	E
Alum or Aluminum Sulfate	E	Formaldehyde	G	Pectin	E	Vegetable Oil	G
Ammonium Chloride, Nitrate, Sulfate	E	Formic Acid, 10%	F	Perchloroethylene	C	Vinegar	E
Ammonium Hydroxide, to 10%	E	Fruit Extracts	E	Petroleum	G	Water, Distilled	E
Ammonium Hydroxide, 10% to 30%	G	Fruit Juices	E	Phenol, to 5%	C	Water, Fresh	E
Aniline	N	Gasoline	G	Phosphoric Acid, to 25%	G	Water and Sewage	E
Animal Oils	C	Glucose	E	Phosphoric Acid, above 25%	C	Wine	E
Bakery Products	E	Glycerine	E	Pickles	E	Xylene	C
Barium Chloride, Sulfate	E	Grape Juice	E	Picric Acid, to 5%	C	Yeast	E
Beer	E	Horse Radish	E	Potassium Bicarbonate, Carbonate	E	Zinc Chloride, Nitrate, Sulfate	E
Benzene	C	Hydrobromic Acid, to 20%	G	Potassium Chloride, Nitrate, Sulfate	E		(6-03 ²)
Benzene Sulfonic Acid, 10%	G	Hydrochloric Acid, to 20%	G	Potassium Hydroxide, to 25%	E		
Benzoic Acid	G	Hydrochloric Acid, 20% to 37%	C	Potassium Hydroxide, 25% to 50%	F		
Black Liquor	G	Hydrofluoric Acid, to 20%	C	Salad Oils	G		
Boric Acid	E	Hydrofluoric Acid, 20% to 70%	N	Salicylic Acid	E		
Bromine Water	C	Hydrofluosilicic Acid	C	Shortening	F		
Butter	F	Hydrogen Peroxide	F	Silver Nitrate	E		
Butyl Acetate	C	Hypochlorous Acid, to 5%	G	Skydrol	C		
Butyl Alcohol	C	Ice Cream	E	Smokehouse Residues	C		
Butyric Acid	C	Jams & Jellies	E	Sodium Bicarbonate, Carbonate	E		
Calcium Chloride, Nitrate, Sulfate	E	Jet Fuel	G	Sodium Bisulfate, Sulfate	G		
Calcium Hydroxide	G	Kerosene	G	Sodium Chloride, Nitrate, Phosphate	E		
Calcium Hypochlorite	C	Ketchup	E	Sodium Hydroxide, to 25%	E		
Carbonated Water	E	Lactic Acid, to 5%	E	Sodium Hydroxide, 25% to 50%	G		
Casein	E	Lactic Acid, 5% to 10%	F	Sodium Hypochlorite	C		
Cheese, all	E	Lactic Acid, above 10%	C	Sodium Sulfide	G		
Chlorine, Dry	F	Lard	G	Sodium Thiosulfate	E		
Chlorine, Wet	F	Linseed Oil	G	Soft Drink Concentrates	E		
Chlorine Water	G	Lux Liquid	E	Soft Drinks	E		
Chloroacetic Acid, to 10%	C	Magnesium Chloride, Nitrate, Sulfate	E	Soups	E		
Chloroform	N	Magnesium Hydroxide	E	Soya Oil	G		
Chromic Acid, to 5%	F	Maleic Acid, 25%	G	Stearic Acid	G		
Chromic Acid, 5% to 10%	C	Malt	E	Sugar, Saturated Solution	E		
Cider	E	Malt Liquors	E	Sulfuric Acid, to 20%	G		
Citric Acid, to 10%	E	Margarine	F	Sulfuric Acid, above 20%	C		
Citrus Fruits	E	Methyl Alcohol	C	Sulfurous Acid	G		
Coffee	E	Methyl Ethyl Ketone	C	Syrup	E		
Copper Chloride, Nitrate, Sulfate	E	Methylene Chloride	N	Tannic Acid	E		
Corn Oil	E	Milk	E	Tartaric Acid	E		
Corn Syrup	E	Mineral Oil	G	Tea	E		
Egg Yolk	E	Mineral Spirits	C	Toluene	C		
Ethyl Acetate	C	Molasses	E	Toluene Sulfonic Acid	C		
Ethyl Alcohol	C	Muriatic Acid	G	Tomato Juice	E		
Ethyl Ether	F	Mustard	E	Trichloroethylene	C		
Ethylene Dichloride	N	Nickel Chloride, Nitrate, Sulfate	E	Trisodium Phosphate	E		

KEY

- E - Excellent
- G - Good
- F - Fair
- N - Not Recommended
- C - Conditional; May be serviceable if the contaminant is immediately removed or washed off the surface.

Note - The information presented in the chemical resistance tables is based on judgments derived from laboratory testing in total immersion service.

The tables have been prepared as a guide to performance. No guarantee of results is made or implied and no liability in connection with this information is assumed. In actual service, floors and walls protected with UREKLAD 210 are subjected to splash and spillage, as well as dilution effects of wash water, mixing with other solutions, wetting and drying cycles, temperature cycling and cleaning procedures. For immersion service, contact ATLAS for recommendation. The information presented herein should be supplemented by in-service testing. The data furnished in the tables may be revised on the basis of further testing.