



Atlas Minerals & Chemicals, Inc.



# DATA SHEET

3-108DS (8-00)

Supersedes 3-108DS (6-96)

## REZKLAD E-BROADCAST

### DESCRIPTION

REZKLAD E-BROADCAST is a decorative and abrasion resistant, epoxy resin broadcast floor topping applied in thicknesses of 3/32" (2.4 mm.) to 1/8" (3.2 mm.). The system consists of:

**REZKLAD E-CONCRETE PRIMER:** A brush or roller applied, solvent free penetrating primer.

**REZKLAD E-BINDER:** A two-component, squeegee applied, solvent free binder.

**UREKLAD 210:** A one-component, polyurethane coating.

**ATLAS AGGREGATES:** Graded fillers of various sizes and types.

**QUARTZ GRANULES:** Colored quartz granules.

### TYPICAL USES

REZKLAD E-BROADCAST is an easy-to-apply, self-leveling epoxy floor topping suitable for areas requiring a decorative, durable surface. REZKLAD E-BROADCAST is an attractive, economical flooring system designed to protect new and existing substrates. The physical strength, durability, abrasion and slip-resistant finish of REZKLAD E-BROADCAST qualifies it as an excellent flooring system for a multitude of applications. The finish texture of this decorative flooring can be controlled by the number of topcoats applied. It is ideal for food process, deli, bakery, assembly and light manufacturing areas, mechanical equipment and clean rooms, laboratories, lunchrooms, locker rooms and hallways. REZKLAD E-BROADCAST is certifiable for use in USDA inspected facilities.

### SUBSTRATE

REZKLAD E-BROADCAST is designed to be applied to new or existing concrete surfaces.

### OPTIONS

**Color:** A selection of tweed and solid colors. Custom colors are available upon request.

**Cove Base:** Use REZKLAD E-COVE BASE BINDER and QUARTZ GRANULES.

**Finishes:** Use UREKLAD™ 210.

## PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ASTM C905	120 lb./cu. ft. (1.92 g./cc.)
Bond Strength, 7 days @ 77°F (25°C)		Concrete fails
Tensile Strength, 7 days @ 77°F (25°C)	ASTM C307	2,400 psi. (16.5 MPa)
Compressive Strength, 7 days @ 77°F (25°C)	ASTM C579	8,700 psi. (60.0 MPa)
Flexural Strength, 7 days @ 77°F (25°C)	ASTM C580	4,500 psi. (31.0 MPa)
Flexural Modulus of Elasticity	ASTM C580	5.5 x 10 <sup>5</sup> psi. (3,800 MPa)
Coefficient of Thermal Exp., in./in./°F (cm./cm./°C)	ASTM C531	4.3 x 10 <sup>-5</sup> (7.7 x 10 <sup>-5</sup> )
Water Absorption	ASTM C413	0.2%
Temperature Resistance Continual Intermittent		140°F (60°C) 175°F (79°C)
Linear Shrinkage	ASTM C531	0.2%
Hardness, Shore D-2		80-90
Abrasion Resistance, Taber CS-17 wh., 1 kg., 1,000 cyc.	ASTM C501	60 mg. weight loss
Flammability	ASTM D635	Burns
Impact Resistance, 1/8" (3.2 mm.) thick, unbonded	Gardner Tester	48 in. lb.
Heat Deflection Temperature	ASTM D648	93°F (34°C)
Cure Rate @ 77°F (25°C)		Overnight for foot traffic, 48 hours for it. wheeled traffic, 7 days for maximum chemical resistance

## PACKAGING AND COVERAGE

### REZKLAD E-CONCRETE PRIMER

**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 m<sup>2</sup>) 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 m<sup>2</sup>) per unit

**REZKLAD E-BINDER****1-Gallon Unit (12 lb. [5.4 kg.]) Consisting of:**

One - 1-gal. can of Resin (8 lb. [3.6 kg.])

Two - 1-qt. cans of Hardener (2 lb. [907 g.]) ea.

**System A:** Coverage approx. 200 sq. ft. (18.6 m<sup>2</sup>) per unit as 1st binder coat; 150 sq. ft. (13.9 m<sup>2</sup>) per unit as 2nd binder coat; 110 sq. ft. (10.2 m<sup>2</sup>) per unit as glaze coat

**System B:** Coverage approx. 85 sq. ft. (7.9 m<sup>2</sup>) per unit as slurry coat; 110 sq. ft. (10.2 m<sup>2</sup>) per unit as glaze coat

**15-Gal. Unit (120 lb. [54.4 kg.]) Consisting of:**

Two - 5-gal. pails of Resin (40 lb. [18.1 kg.]) ea.

One - 5-gal. pail of Hardener (40 lb. [18.1 kg.])

**System A:** Coverage approx. 2,000 sq. ft. (186 m<sup>2</sup>) per unit as 1st binder coat; 1,500 sq. ft. (139 m<sup>2</sup>) per unit as 2nd binder coat; 1,100 sq. ft. (102 m<sup>2</sup>) per unit as glaze coat

**System B:** Coverage approx. 850 sq. ft. (79.0 m<sup>2</sup>) per unit as slurry coat; 1,100 sq. ft. (102 m<sup>2</sup>) per unit as glaze coat

**REZKLAD E-COVE BASE BINDER****1-Gallon Unit (8 lb. [3.6 kg.]) Consisting of:**

One - 1-gal. can of Resin (6 lb. [2.7 kg.])

One - 1-qt. can of Hardener (2 lb. [907 g.])

Coverage: Approx. 71.4 lin. ft. (21.8 m.) per unit when mixed with 42 lb. (19.1 kg.) of QUARTZ GRANULES and applied to a 6" (15.2 cm.) height @ 1/8" (3.2 mm.) thickness

**UREKLAD 210**

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

Coverage: Approx. 250 sq. ft. (23.2 m<sup>2</sup>) per unit per coat

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

Coverage: Approx. 1,250 sq. ft. (116 m<sup>2</sup>) per unit per coat

**ATLAS AGGREGATE No. 8**

One - bag (100 lb. [45.4 kg.])

Coverage: Approx. 650 sq. ft. (60.4 m<sup>2</sup>) per bag when used with System B slurry coat

**QUARTZ GRANULES**

One - bag (50 lb. [22.7 kg.])

Coverage: Approx. 70 sq. ft. (6.5 m<sup>2</sup>) per bag when used with System A; Approx. 80 sq. ft. (7.4 m<sup>2</sup>) per bag when used with System B

**Note:** When applying the broadcast finish, System A will result in a nominal thickness of 3/32" (2.4 mm.); System B will result in a nominal thickness of 1/8" (3.2 mm.).

**SURFACE PREPARATION**

Abrasive grit blasting is recommended. Where this is impractical, chemical preparation is acceptable when sufficient drying time is available. The substrate must

be structurally sound, clean and dry.

For additional information, refer to Surface Preparation, Data Sheet PS-30.

**APPLICATION**

REZKLAD E-CONCRETE PRIMER is not required on steel surfaces and on concrete that is not porous.

**System A:**

1. When using a primer, allow it to become tacky before applying a coat of REZKLAD E-BINDER and immediately broadcast to excess a layer of QUARTZ GRANULES.
2. Allow to cure and remove unbonded granules by sweeping or vacuuming.
3. Repeat the application of REZKLAD E-BINDER using a rubber squeegee. Broadcast granules quickly to excess. Allow to cure and remove unbonded granules.
4. Apply a glaze coat of REZKLAD E-BINDER.
5. For additional wear and scratch resistance, apply UREKLAD 210 after the glaze coat has cured overnight.
6. If a smooth orange-peel type finish is desired, it may require additional topcoats.

**System B:**

1. When using a primer, allow it to become tacky before applying a slurry coat of REZKLAD E-BINDER Resin and Hardener mixed with ATLAS AGGREGATE No. 8 and QUARTZ GRANULES using a finishing trowel.
2. After spreading, roll the topping with a spike roller to release entrapped air and allow to self-level.
3. Broadcast QUARTZ GRANULES in excess into the wet slurry coat.
4. After overnight cure, remove excess granules by sweeping or vacuuming. Scrape off high points using a steel trowel.
5. Apply a glaze coat consisting of REZKLAD E-BINDER Resin and Hardener.
6. For additional wear and scratch resistance, apply UREKLAD 210 after the glaze coat has cured overnight.
7. If a smooth orange-peel type finish is desired, it may require additional topcoats.

**LIMITATIONS**

Substrate temperature should be between 65°F (18°C) and 85°F (29°C). Do not apply when relative humidity is greater than 75% or on substrates that can flex. Maximum use temperature for continual service is 140°F (60°C) depending upon chemical exposure.

**MAINTENANCE**

**Cleaning:** Clean using commercially available institutional or industrial cleaners. DO NOT use sustained steam or high temperature solutions or cleaners that contain solvents.

**Repair:** Should the topping be damaged by severe physical abuse, it can be repaired by thoroughly cleaning and reapplying the REZKLAD E-BROADCAST SYSTEM.

### **PRODUCT SPECIFICATION**

The system shall be REZKLAD E-BROADCAST as manufactured by Atlas Minerals & Chemicals, Inc. The manufacturer shall be ISO 9001 registered for the manufacture and sale of corrosion resistant products.

### **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.**

## CHEMICAL RESISTANCE OF REZKLAD E-BROADCAST (3-108DS)

Acetic Acid, to 10%	F	Fatty Acids	C	Nitric Acid, 5% to 10%	C	Trichloroethylene	C
Acetic Acid, 10% to 50%	C	Ferric Chloride, Nitrate, Sulfate	G	Oleic Acid	C	Trisodium Phosphate	E
Acetone	C	Fluosilicic Acid	C	Olive Oil	C	Tung Oil	F
Alum or Aluminum Sulfate	E	Formaldehyde	E	Oxalic Acid	G	Turpentine	G
Ammonium Chloride, Nitrate, Sulfate	E	Formic Acid, 10%	F	Pectin	E	Urea	E
Ammonium Hydroxide, to 10%	E	Fruit Extracts	F	Perchloroethylene	C	Urine	G
Ammonium Hydroxide, 10% to 30%	G	Fruit Juices	F	Petroleum	E	Vegetable Oil	C
Aniline	N	Gasoline	E	Phenol, to 5%	C	Vinegar	E
Animal Oils	C	Glucose	F	Phosphoric Acid, to 25%	E	Water, Distilled	E
Bakery Products	G	Glycerine	G	Phosphoric Acid, 25% to 50%	G	Water, Fresh	E
Barium Chloride, Sulfate	E	Grape Juice	F	Phosphoric Acid, above 50%	C	Water and Sewage	G
Beer	E	Horse Radish	E	Pickles	E	Wine	G
Benzene	C	Hydrobromic Acid, to 20%	G	Picric Acid, to 5%	E	Xylene	F
Benzene Sulfonic Acid, 10%	E	Hydrochloric Acid, to 20%	E	Potassium Bicarbonate, Carbonate	E	Yeast	E
Benzoic Acid	E	Hydrochloric Acid, 20% to 37%	G	Potassium Chloride, Nitrate, Sulfate	E	Zinc Chloride, Nitrate, Sulfate	E
Black Liquor	E	Hydrofluoric Acid, to 20%	C	Potassium Hydroxide, to 25%	E	(8-00)	
Boric Acid	E	Hydrofluoric Acid, 20% to 70%	N	Potassium Hydroxide, 25% to 50%	F		
Bromine Water	C	Hydrofluosilicic Acid	C	Salad Oils	C		
Butter	C	Hydrogen Peroxide	G	Salicylic Acid	G		
Butyl Acetate	C	Hypochlorous Acid, to 5%	F	Shortening	C		
Butyl Alcohol	C	Ice Cream	E	Silver Nitrate	G		
Butyric Acid	C	Jams & Jellies	F	Skydrol	G		
Calcium Chloride, Nitrate, Sulfate	E	Jet Fuel	E	Smokehouse Residues	F		
Calcium Hydroxide	E	Kerosene	E	Sodium Bicarbonate, Carbonate	E		
Calcium Hypochlorite	F	Ketchup	G	Sodium Bisulfate, Sulfate	E	<b>KEY</b>	
Carbonated Water	E	Lactic Acid, to 5%	G	Sodium Chloride, Nitrate, Phosphate	E	E - Excellent	
Casein	G	Lactic Acid, 5% to 10%	F	Sodium Hydroxide, to 25%	E	G - Good	
Cheese, all	G	Lactic Acid, above 10%	C	Sodium Hydroxide, 25% to 50%	F	F - Fair	
Chlorine, Dry	F	Lard	C	Sodium Hypochlorite	F	N - Not Recommended	
Chlorine, Wet	F	Linseed Oil	F	Sodium Sulfide, Sulfite	G	C - Conditional; May be serviceable if the contaminant is immediately removed or washed off the surface.	
Chlorine Water	E	Lux Liquid	E	Sodium Thiosulfate	E		
Chloroacetic Acid, to 10%	C	Magnesium Chloride, Nitrate, Sulfate	E	Soft Drink Concentrates	C		
Chloroform	N	Magnesium Hydroxide	E	Soft Drinks	G		
Chromic Acid, to 5%	F	Maleic Acid, 25%	C	Soups	E		
Chromic Acid, 5% to 10%	C	Malt	G	Soya Oil	C		
Cider	F	Malt Liquors	G	Stearic Acid	E		
Citric Acid, to 10%	G	Margarine	C	Sugar, Saturated Solution	F		
Citrus Fruits	G	Methyl Alcohol	E	Sulfuric Acid, to 20%	E		
Coffee	E	Methyl Ethyl Ketone	N	Sulfuric Acid, 20% to 50%	G		
Copper Chloride, Nitrate, Sulfate	E	Methylene Chloride	N	Sulfuric Acid, above 50%	C		
Corn Oil	G	Milk	E	Sulfurous Acid	E		
Corn Syrup	G	Mineral Oil	E	Syrup	C		
Egg Yolk	E	Mineral Spirits	E	Tannic Acid	G		
Ethyl Acetate	C	Molasses	F	Tartaric Acid	G		
Ethyl Alcohol	E	Muriatic Acid	G	Tea	E		
Ethyl Ether	F	Mustard	G	Toluene	F		
Ethylene Dichloride	N	Nickel Chloride, Nitrate, Sulfate	E	Toluene Sulfonic Acid	F		
Ethylene Glycol	G	Nitric Acid, to 5%	F	Tomato Juice	G		

**Note** - The information presented in the chemical resistance tables is based on judgments derived from laboratory testing and field service performance. 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 REZKLAD E-BROADCAST 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.