



Atlas Minerals & Chemicals, Inc.



DATA SHEET

7-30PI (8-01²)
Supersedes 7-30PI (8-00)

REZKLAD® E-HP SURFACER

DESCRIPTION

REZKLAD E-HP Surfacers is an unpigmented corrosion resistant epoxy topcoat for monolithic epoxy floor toppings and concrete floors. REZKLAD E-HP Surfacers is roller, squeegee or brush applied.

TYPICAL USES

REZKLAD E-HP Surfacers is an easy-to-apply surface coating for monolithic floor toppings. It is designed for the chemical exposure and operating conditions of the food processing, beverage, pharmaceutical and metal treatment industries. REZKLAD E-HP Surfacers is ideal for production areas, chemical storage rooms and traffic aisles exposed to organic acids, mild alkalis, solvents or high concentrations of inorganic acids. REZKLAD E-HP Surfacers is certifiable for use in USDA inspected facilities.

CHEMICAL RESISTANCE

REZKLAD E-HP Surfacers is resistant to organic acids, including 10% acetic, 10% lactic and 10% citric, and organic solvents, such as toluene, xylene and benzene. It is also resistant to dilute alkalis and high concentrations of inorganic acids, including hydrochloric acid, phosphoric acid, 98% sulfuric acid, 30% nitric acid and 10% chromic acid. Refer to the chemical resistance chart for specific information.

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

METHOD OF INSTALLATION

REZKLAD E-HP Surfacers is designed to be applied with a roller, squeegee or brush. Slip resistant floor finishes are achieved by broadcasting ATLAS® AGGREGATE into the wet basecoat and sealed with a second coat of REZKLAD E-HP Surfacers.

AVAILABLE COLORS

REZKLAD E-HP Surfacers is clear / amber.

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 m²) per unit

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
% Solids	ATLAS	100
Temperature Resistance, as a Coating over Concrete* Continual Intermittent	ATLAS	160°F (71°C) 212°F (100°C)
Abrasion Resistance, Taber CS-17 wh., 1 kg., 1,000 cyc. Smooth Finish Broadcast to Excess	ASTM C501	159 mg. 87 mg.
Hardness, Shore D-2	ASTM D2240	80-85

*When applied over an epoxy monolithic floor topping, temperature resistance may vary.

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

REZKLAD E-HP Surfacers

6 lb. 12 oz. (3.1 kg.):

One - 1/2-gal. can of Resin (4 lb. 12 oz. [2.2 kg.])

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

68 lb. (30.8 kg.):

One - 5-gal. pail of Resin (48 lb. [21.8 kg.])

One - 5-gal. pail of Hardener (20 lb. [9.1 kg.])

COVERAGE OF THE REZKLAD E-HP SURFACER

Total Weight	5 mils	10 mils	Over Aggregate
6 lb. 12 oz.	230 sq. ft.	115 sq. ft.	85 sq. ft.
68 lb.	2,335 sq. ft.	1,165 sq. ft.	895 sq. ft.

ATLAS AGGREGATE No. 8 (Fine Finish)

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

Coverage broadcast to excess: Approx. 500 sq. ft. (46.5 m²) per bag

Coverage light broadcast: Approx. 2,000 sq. ft. (186 m²) per bag

ATLAS AGGREGATE No. 2 (Coarse Finish)

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

Coverage broadcast to excess: Approx. 500 sq. ft. (46.5 m²) per bag

Coverage light broadcast: Approx. 2,000 sq. ft. (186 m²) per bag

MIX RATIO CHART - REZKLAD E-CONCRETE PRIMER

REZKLAD E-CONCRETE PRIMER	Weight	Volume
REZKLAD E-CONCRETE PRIMER Resin	2 lb. 8 oz. (1.1 kg.)	34.6 fl. oz. (1.0 liters)
REZKLAD E-CONCRETE PRIMER Hardener	15 oz. (425 g.)	13.7 fl. oz. (0.41 liters)
Batch Size	3 lb. 7 oz. (1.6 kg.)	48.3 fl. oz. (1.4 liters)

SURFACE PREPARATION

REZKLAD E-HP Surfacer can be applied to epoxy resin based monolithic floor topping or concrete. The substrate must be structurally sound, clean, dry and free of all contaminants, such as sealers, curing compounds, coatings, oil, dirt, dust and water. Previously applied coatings or paint must be removed. Finished concrete must be free of ridges, protrusions, fins, mortar splatter and have a tight laitance-free steel trowel finish. Abrasive grit blasting is recommended. Where impractical, chemical preparation by acid washing is acceptable. A finish similar to the profile of 100 to 120 grit sandpaper is suggested.

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

TEMPERATURE DURING APPLICATION

Store REZKLAD E-HP Surfacer components and REZKLAD E-CONCRETE PRIMER 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, REZKLAD E-HP Surfacer and REZKLAD E-CONCRETE PRIMER are between 60°F (16°C) and 85°F (29°C). Minimum temperature for installation is 60°F (16°C). At temperatures below 60°F (16°C), the product may not set or cure properly. Do not apply the REZKLAD E-CONCRETE PRIMER or REZKLAD E-HP Surfacer to substrates that flex. Do not apply when the relative humidity is greater than 75% or the substrate temperature is less than 5°F (3°C) from the dew point. Protect uncured primer and topcoat(s) from moisture contamination until they can support foot traffic.

TYPICAL WORKING & 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

MIX RATIO CHART - REZKLAD E-HP SURFACER

REZKLAD E-HP Surfacer	Weight	Volume
REZKLAD E-HP Resin	4 lb. 12 oz. (2.2 kg.)	62 fl. oz. (1.8 liters)
REZKLAD E-HP Hardener	2 lb. (907 g.)	31 fl. oz. (0.92 liters)
Batch Size	6 lb. 12 oz. (3.1 kg.)	92 fl. oz. (2.7 liters)

MIXING AND APPLICATION OF THE REZKLAD E-CONCRETE PRIMER

Stir the contents of the individual resin and hardener containers prior to blending. Mixing of the components should be done with a hand drill equipped with a "Jiffy" type mixer at 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 a clean, dry plastic or metal container. Mix thoroughly for one minute.
- Apply REZKLAD E-CONCRETE PRIMER with a brush or short nap roller making sure to work it into the pores of the concrete. Do not allow puddling.
- For optimum adhesion, apply REZKLAD E-HP Surfacer when the primer is tacky or dry. 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.

TYPICAL WORKING & DRYING TIMES OF THE REZKLAD E-HP SURFACER

Temperature	Working Time	Support Foot Traffic	Maximum Drying Time*
65°F (18°C)	35 min.	16 hours	48 hours
75°F (24°C)	25 min.	12 hours	36 hours
85°F (29°C)	15 min.	8 hours	24 hours

*Maximum Drying time listed is for drying time between recoats

MIXING OF THE REZKLAD E-HP SURFACER

Stir the contents of the individual resin and hardener containers prior to blending. Mixing of the components should be done by hand with a paint stirrer or with a hand drill equipped with a "Jiffy" type mixer at 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.

6 lb. 12 oz. (3.1 kg.):

- a. Combine the contents of the 1/2-gallon can (4 lb. 12 oz. [2.2 kg.]) of REZKLAD E-HP Resin with the 1-quart can (2 lb. [907 g.]) of REZKLAD E-HP Hardener in a clean, dry plastic or metal container.
- b. Mix thoroughly for approximately two minutes.

68 lb. (30.8 kg.):

- a. Combine 62 fluid ounces (1.8 liters) of REZKLAD E-HP Resin and 31 fluid ounces (0.92 liters) REZKLAD E-HP Hardener in a clean, dry plastic or metal container.
- b. Mix thoroughly for approximately two minutes.

SURFACE PREPARATION OVER AN EPOXY MONOLITHIC FLOOR TOPPING

If REZKLAD E-HP Surfacer is installed within 48 hours of the application of the epoxy monolithic floor topping, REZKLAD E-CONCRETE PRIMER is not required. If REZKLAD E-HP Surfacer is to be applied over an epoxy monolithic floor topping that has been installed for more than 48 hours, the topping surface must first be sanded, cleaned and primed with REZKLAD E-CONCRETE PRIMER. Apply the primer as described in "Mixing and Application of the REZKLAD E-CONCRETE PRIMER".

**APPLICATION OF THE REZKLAD E-HP SURFACER
Topcoat over an Epoxy Monolithic Floor Topping*:**

- a. Apply a 5 mil (13 mm.) coat of REZKLAD E-HP Surfacer with a medium nap roller or flat rubber squeegee.
- b. Immediately back roll with a short nap roller.
- c. Fill any pin holes or other defects with a second application of REZKLAD E-HP Surfacer.

Slip Resistant Surface over an Epoxy Monolithic Floor Topping*:

- a. Apply a 10 mil (0.25 mm.) coat of REZKLAD E-HP Surfacer with a medium nap roller.
- b. Within 10 minutes, broadcast ATLAS AGGREGATE into the wet REZKLAD E-HP Surfacer. The aggregate can be broadcast in a range from light to excess. The amount of aggregate and size of aggregate will determine the finished texture.
- c. After the REZKLAD E-HP Surfacer can support foot traffic, vacuum or sweep to remove any unbonded aggregate.
- d. Apply a second coat of REZKLAD E-HP Surfacer with a flat rubber squeegee or short nap roller to seal aggregate.

Smooth Coating (no aggregate) over Concrete*:

- a. Apply REZKLAD E-CONCRETE PRIMER with a short nap roller as described in "Mixing and Application of the REZKLAD E-CONCRETE PRIMER".

- b. Apply a 10 mil (0.25 mm.) coat of REZKLAD E-HP Surfacer with a medium nap roller.
- c. After REZKLAD E-HP Surfacer can support foot traffic, apply a second 10 mil (0.25 mm.) coat of REZKLAD E-HP Surfacer with a short nap roller.

Slip Resistant Coating over Concrete*:

- a. Apply REZKLAD E-CONCRETE PRIMER with a short nap roller as described in "Mixing and Application of the REZKLAD E-CONCRETE PRIMER".
- b. Apply a 10 mil (0.25 mm.) coat of REZKLAD E-HP Surfacer with a medium nap roller.
- c. Within 10 minutes, broadcast ATLAS AGGREGATE into the wet REZKLAD E-HP Surfacer. The aggregate can be broadcast in a range from light to excess. The amount of aggregate and size of aggregate will determine the finished texture.
- d. After the REZKLAD E-HP Surfacer can support foot traffic, vacuum or sweep to remove any unbonded aggregate.
- e. Apply a second coat of REZKLAD E-HP Surfacer with a flat rubber squeegee or short nap roller to seal aggregate.

***Note:** If the REZKLAD E-CONCRETE PRIMER or REZKLAD E-HP Surfacer are allowed to dry for longer than the maximum drying time, the surface must be sanded and cleaned before proceeding to the next step.

OPTIONAL SURFACE FINISHES

SMOOTH: If a smoother, less textured surface is required, apply additional coats of REZKLAD E-HP Surfacer with a short nap roller until desired finish is attained.

CLEANING OF TOOLS AND EQUIPMENT

Steel wool, soap and warm water will remove the materials referred to in this Data Sheet from mixing tools and equipment if cleaning is done immediately after use. Solvents, such as methyl ethyl ketone, toluene or xylene, will have to be used after the material has begun to harden. 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 one year.

PRODUCT SPECIFICATION

The system shall be REZKLAD E-HP Surfacer as manufactured by Atlas Minerals & Chemicals, Inc. and be certifiable for use in USDA inspected facilities.

The system shall consist of:

- REZKLAD E-CONCRETE PRIMER, brush or roller applied
- REZKLAD E-HP Surfacer, roller or squeegee applied

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-HP SURFACER (7-30PI)

Acetic Acid, to 5%	E
Acetic Acid, 5% to 10%	F
Acetic Acid, above 10%	N
Acetone	C
Alum or Aluminum Sulfate	E
Ammonium Chloride, Nitrate, Sulfate	E
Ammonium Hydroxide, to 10%	E
Ammonium Hydroxide, 10% to 30%	G
Aniline	N
Animal Oils	C
Bakery Products	E
Barium Chloride, Sulfate	E
Beer	E
Benzene	C
Benzene Sulfonic Acid, 10%	G
Benzoic Acid	E
Black Liquor	E
Boric Acid	E
Bromine Water	N
Butter	G
Butyl Acetate	G
Butyl Alcohol	G
Butyric Acid	F
Calcium Chloride, Nitrate, Sulfate	E
Calcium Hydroxide	E
Calcium Hypochlorite	E
Carbonated Water	E
Casein	G
Cheese, all	G
Chlorine, Dry	F
Chlorine, Wet	F
Chlorine Water	E
Chloroacetic Acid, to 10%	C
Chloroform	N
Chromic Acid, to 10%	G
Chromic Acid, above 10%	C
Cider	F
Citric Acid, to 10%	G
Citrus Fruits	G
Coffee	E
Copper Chloride, Nitrate, Sulfate	E
Corn Oil	G
Corn Syrup	G
Egg Yolk	E
Ethyl Acetate	F
Ethyl Alcohol	E
Ethyl Ether	F
Ethylene Dichloride	N
Ethylene Glycol	G
Fatty Acids	G
Ferric Chloride, Nitrate, Sulfate	G
Fluosiilic Acid	C
Formaldehyde	E
Fomic Acid, 10%	F
Fruit Extracts	G
Fruit Juices	G
Gasoline	E
Glucose	F
Glycerine	G
Grape Juice	G
Horse Radish	E
Hydrobromic Acid, to 20%	G
Hydrochloric Acid, to 20%	E
Hydrochloric Acid, 20% to 37%	F
Hydrofluoric Acid, to 20%	C
Hydrofluoric Acid, 20% to 70%	N
Hydrofluosilicic Acid	C
Hydrogen Peroxide	G
Hypochlorous Acid, to 5%	F
Ice Cream	E
Jams & Jellies	F
Jet Fuel	E
Kerosene	E
Ketchup	G
Lactic Acid, to 5%	E
Lactic Acid, 5% to 10%	G
Lactic Acid, above 10%	F
Lard	E
Linseed Oil	F
Lux Liquid	E
Magnesium Chloride, Nitrate, Sulfate	E
Magnesium Hydroxide	E
Maleic Acid, 25%	F
Malt	G
Malt Liquors	G
Margarine	C
Methyl Alcohol	E
Methyl Ethyl Ketone	C
Methylene Chloride	N
Milk	E
Mineral Oil	E
Mineral Spirits	E
Molasses	F
Muriatic Acid	E
Mustard	G
Nickel Chloride, Nitrate, Sulfate	E
Nitric Acid, to 10%	E
Nitric Acid, 10% to 20%	G
Nitric Acid, 20% to 30%	C
Nitric Acid, above 30%	N
Oleic Acid	E
Olive Oil	E
Oxalic Acid	G
Pectin	E
Perchloroethylene	C
Petroleum	E
Phenol, to 5%	C
Phosphoric Acid, to 50%	E
Phosphoric Acid, above 50%	G
Pickles	E
Picric Acid, to 5%	E
Potassium Bicarbonate, Carbonate	E
Potassium Chloride, Nitrate, Sulfate	E
Potassium Hydroxide, to 25%	E
Potassium Hydroxide, 25% to 50%	F
Salad Oils	E
Salicylic Acid	G
Shortening	E
Silver Nitrate	G
Skydrol	G
Smokehouse Residues	F
Sodium Bicarbonate, Carbonate	E
Sodium Bisulfate, Sulfate	E
Sodium Chloride, Nitrate, Phosphate	E
Sodium Hydroxide, to 25%	E
Sodium Hydroxide, 25% to 50%	F
Sodium Hypochlorite	E
Sodium Sulfide, Sulfite	G
Sodium Thiosulfate	E
Soft Drink Concentrates	C
Soft Drinks	E
Soups	E
Soya Oil	C
Stearic Acid	E
Sugar, Saturated Solution	E
Sulfuric Acid, to 80%	E
Sulfuric Acid, 80% to 93%	G
Sulfuric Acid, 93% to 98%	F
Sulfurous Acid	E
Syrup	C
Tannic Acid	G
Tartaric Acid	G
Tea	E
Toluene	E
Toluene Sulfonic Acid, 10%	G
Tomato Juice	G
Trichloroethylene	C
Trisodium Phosphate	G
Tung Oil	F
Turpentine	G
Urea	E
Urine	G
Vegetable Oil	E
Vinegar	E
Water, Distilled	E
Water, Fresh	E
Water and Sewage	G
Wine	G
Xylene	E
Yeast	E
Zinc Chloride, Nitrate, Sulfate	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 REZKLAD E-HP Surfacers 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. Contact with certain concentrated acids may cause the surface of REZKLAD E-HP Surfacers to change color. This color change will not affect the chemical resistance. 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.

(8-01²)