



Atlas Minerals & Chemicals, Inc.



DATA SHEET

3-701PI (8-23)
Supersedes 3-701PI (6-19)

UREKLAD® JOINT SEALANT / UREKLAD® JOINT SEALANT VERTICAL GRADE

DESCRIPTION

UREKLAD JOINT SEALANT and UREKLAD JOINT SEALANT VERTICAL GRADE are chemical resistant expansion joint sealants.

TYPICAL USES

UREKLAD JOINT SEALANT and UREKLAD JOINT SEALANT VERTICAL GRADE possess excellent elongation, compressibility and abrasion resistance. They have excellent bond strength to numerous substrates and thermal resistance from -10°F (-24°C) to 200°F (95°C). UREKLAD JOINT SEALANT and UREKLAD JOINT SEALANT VERTICAL GRADE are certifiable for use in USDA inspected facilities.

CHEMICAL RESISTANCE

UREKLAD JOINT SEALANT and UREKLAD JOINT SEALANT VERTICAL GRADE are resistant to many dilute solutions of acids, alkalis and salts. Refer to the chemical resistance chart for specific information.

AVAILABLE COLORS

Standard colors of UREKLAD SEALANTS are beige, black, gray and red.

PACKAGING AND COVERAGE

ATLAS® EXPANSION JOINT PRIMER

1-quart can (1 lb. 12 oz. [794 g.])

Coverage: 450 linear feet (137 m.) per can

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE	
		UJS	UJSVG
Density	ASTM C905	70.5 lb./cu. ft. (1.13 g./cc.)	73.0 lb./cu. ft. (1.17 g./cc.)
Tensile Strength, 7 days @ 77°F (25°C)	ASTM D412	1,200 psi. (8.27 MPa)	1,200 psi. (8.27 MPa)
Tensile Elongation, 7 days @ 77°F (25°C)	ASTM D412	100%	85%
Temperature Resistance	—	-10°F to 200°F (-24°C to 95°C)	-10°F to 200°F (-24°C to 95°C)
Hardness, Shore A	—	90	90

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

UREKLAD JOINT SEALANT

1-Gallon Unit (6 lb. 7 oz. [2.9 kg.]) Consisting of:

One - 1-gal. can of Component A (4 lb. 7 oz. [2.0 kg.])

One - 1-qt. can of Component B (2 lb. [908 g.])

UREKLAD JOINT SEALANT VERTICAL GRADE

1-Gallon Unit (8 lb. 14 oz. [4.0 kg.]) Consisting of:

One - 1-gal. can of Component A (6 lb. 14 oz. [3.1 kg.])

One - 1-qt. can of Component B (2 lb. [908 g.])

UREKLAD CLEANING SOLVENT

1-gal. can (6 lb. 8 oz. [2.9 kg.])

5-gal. pail (32 lb. 8 oz. [14.7 kg.])

SURFACE PREPARATION

Substrates 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.

ESTIMATING TABLE OF THE UREKLAD JOINT SEALANT / UREKLAD JOINT SEALANT VERTICAL GRADE*

Joint Width	UREKLAD JOINT SEALANT Linear Feet per Unit - Joint Depth				UREKLAD JOINT SEALANT VERT. GRADE Linear Feet per Unit - Joint Depth			
	1/4"	3/8"	1/2"	3/4"	1/4"	3/8"	1/2"	3/4"
	1/4"	212	141	106	70	216	144	108
3/8"	141	94	70	47	144	96	72	48
1/2"	106	70	53	35	108	72	54	36
3/4"	70	47	35	23	72	48	36	24

*A joint width to joint depth ratio of 2 to 1 is recommended.

NOTE: ATLAS makes it a practice to continuously update and enhance our CCM (Corrosion Resistant Construction Materials) products. For the most recent version of any Data Sheet, please visit our Web site at www.atlasmin.com.

Concrete: Finished concrete must be free of ridges, protrusions, fins, mortar splatter and have a tight laitance-free 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.

Metals: Metal surfaces should be grit blasted to a NACE #1 white metal blast cleaned surface finish. When grit blasting is not practical, clean by wire brushing or with abrasive paper and wash with degreasing solvent such as xylene.

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

TEMPERATURE DURING APPLICATION

Store UREKLAD JOINT SEALANT and UREKLAD JOINT SEALANT VERTICAL GRADE 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, UREKLAD JOINT SEALANT and UREKLAD JOINT SEALANT VERTICAL GRADE are between 65°F (18°C) and 85°F (29°C). Do not apply when the relative humidity is 75% or higher.

Minimum temperature for installation is 65°F (18°C). At temperatures below 65°F (18°C), the product may not set or cure properly.

MIXING AND APPLICATION OF THE PRIMERS

Both ATLAS EXPANSION JOINT PRIMER and REZKLAD E-CONCRETE PRIMER are acceptable for use prior to placement of UREKLAD JOINT SEALANT.

ATLAS EXPANSION JOINT PRIMER

ATLAS EXPANSION JOINT PRIMER is a one component product. Stir the ATLAS EXPANSION JOINT PRIMER prior to application and apply to the sides of the joint.

TYPICAL DRYING TIMES OF THE ATLAS EXPANSION JOINT PRIMER

Temperature	Drying Time
35°F (2°C)	8 hours
45°F (7°C)	6 hours
55°F (13°C)	4 hours
65°F (18°C)	3 hours
75°F (24°C)	2 hours
85°F (29°C)	1-1/2 hours

REZKLAD E-CONCRETE PRIMER

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.

- Combine the contents of the cans of REZKLAD E-CONCRETE PRIMER Resin and Hardener in a suitable mixing container. Mix thoroughly for one minute.
- Apply with a brush. Allow to dry. Refer to the "Typical Working and Drying Times" chart.

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

MIXING AND APPLICATION OF THE UREKLAD JOINT SEALANT AND UREKLAD JOINT SEALANT VERTICAL GRADE

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.

- Individually stir the contents of both the Component A and Component B cans for approximately one minute prior to blending the components.
- Place the contents of the can of Component B in the can of Component A.
- Mix the combined components for approximately two minutes. While mixing, scrape along the sides and bottom of the can to ensure complete mixing of the two components.
- Transfer the mixture into a clean container, scraping sides and bottom to remove contents. Stir again before installing material.
- Apply UREKLAD JOINT SEALANT by pouring into joints. Apply UREKLAD JOINT SEALANT VERTICAL GRADE using a trowel to place material into joints.
- Allow to cure, protecting from moisture until set.

TYPICAL WORKING AND DRYING TIMES OF THE UREKLAD JOINT SEALANT / UREKLAD JOINT SEALANT VERTICAL GRADE

Temperature	Working Time	Urekald Joint Sealant Minimum Drying Time	Urekald Joint Sealant VG Minimum Drying Time
70°F (21°C)	40-50 min.	24 hours	24 hours
75°F (24°C)	35-40 min.	20 hours	20 hours
85°F (29°C)	30-35 min.	16 hours	16 hours

CLEANING OF TOOLS AND EQUIPMENT

Solvents, such as UREKLAD CLEANING SOLVENT, 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 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 UREKLAD JOINT SEALANT or UREKLAD JOINT SEALANT VERTICAL GRADE 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 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 UREKLAD® JOINT SEALANT / UREKLAD® JOINT SEALANT VERTICAL GRADE (3-701PI)

Acetic Acid, to 5%	F	Fatty Acids	C	Nitric Acid, 5% to 10%	F	Urea	E
Acetic Acid, 5% to 50%	C	Ferric Chloride, Nitrate, Sulfate	E	Oleic Acid	C	Urine	G
Acetone	C	Fluosilicic Acid	C	Olive Oil	G	Vegetable Oil	E
Alum or Aluminum Sulfate	E	Formaldehyde	F	Oxalic Acid	C	Vinegar	F
Ammonium Chloride, Nitrate, Sulfate	E	Formic Acid, 10%	G	Pectin	F	Water, Distilled	E
Ammonium Hydroxide, to 10%	E	Fruit Extracts	E	Perchloroethylene	N	Water, Fresh	E
Ammonium Hydroxide, 10% to 30%	F	Fruit Juices	G	Petroleum	C	Water and Sewage	E
Aniline	N	Gasoline	C	Phenol, to 5%	C	Wine	F
Animal Oils	N	Gluconic Acid, 5%	E	Phosphoric Acid, to 25%	G	Xylene	N
Bakery Products	G	Glucose	F	Phosphoric Acid, above 25%	C	Yeast	C
Barium Chloride, Sulfate	E	Glycerine	C	Pickles	C	Zinc Chloride, Nitrate, Sulfate	E
Beer	E	Grape Juice	G	Picric Acid, to 5%	C	(8-23)	
Benzene	N	Horse Radish	G	Potassium Bicarbonate, Carbonate	E	KEY	
Benzene Sulfonic Acid, 10%	G	Hydrobromic Acid, to 20%	G	Potassium Chloride, Nitrate, Sulfate	E	E - Excellent	
Benzoic Acid	G	Hydrochloric Acid, to 20%	G	Potassium Hydroxide, to 50%	F	G - Good	
Black Liquor	G	Hydrochloric Acid, above 20%	C	Salad Oils	E	F - Fair	
Boric Acid	E	Hydrofluoric Acid, to 20%	G	Salicylic Acid	F	N - Not Recommended	
Bromine Water	C	Hydrofluoric Acid, above 20%	C	Shortening	G	C - Conditional; May be serviceable if the	
Butter	G	Hydrofluosilicic Acid, to 20%	G	Silver Nitrate	E	contaminant is immediately removed or	
Butyl Acetate	N	Hydrogen Peroxide	E	Skydrol	N	washed off the surface.	
Butyl Alcohol	F	Hypochlorous Acid, to 5%	G	Smokehouse Residues	N	Note - The information presented in the chemical	
Butyric Acid	N	Ice Cream	G	Sodium Bicarbonate, Carbonate	E	resistance tables is based on judgments derived	
Calcium Chloride, Nitrate, Sulfate	E	Jams & Jellies	F	Sodium Bisulfate, Sulfate	G	from laboratory testing and field service	
Calcium Hydroxide	G	Jet Fuel	N	Sodium Chloride, Nitrate, Phosphate	E	performance. The tables have been prepared as	
Calcium Hypochlorite	F	Kerosene	N	Sodium Hydroxide, to 25%	G	a guide to performance. No guarantee of results	
Carbonated Water	E	Ketchup	G	Sodium Hydroxide, 25% to 50%	F	is made or implied and no liability in connection	
Casein	G	Lactic Acid, to 10%	G	Sodium Hypochlorite	E	with this information is assumed. In actual	
Cheese, all	N	Lactic Acid, above 10%	C	Sodium Sulfide, Sulfite	G	service, floors and walls protected with	
Chlorine, Dry or Wet	N	Lard	G	Sodium Thiosulfate	E	UREKLAD JOINT SEALANT or UREKLAD	
Chlorine Water	G	Linseed Oil	N	Soft Drink Concentrates	F	JOINT SEALANT VERTICAL GRADE are	
Chloroacetic Acid, to 10%	C	Lux Liquid	E	Soft Drinks	E	subjected to splash and spillage, as well as	
Chloroform	N	Magnesium Chloride, Nitrate, Sulfate	E	Soups	G	dilution effects of wash water, mixing with other	
Chromic Acid, to 5%	G	Magnesium Hydroxide	E	Soya Oil	C	solutions, wetting and drying cycles, temperature	
Chromic Acid, 5% to 10%	F	Maleic Acid, 25%	C	Stearic Acid	F	cycling and cleaning procedures. For immersion	
Cider	G	Malt	F	Sugar, Saturated Solution	F	service, contact ATLAS for recommendation.	
Citric Acid, to 10%	G	Malt Liquors	F	Sulfuric Acid, to 40%	E	The information presented herein should be	
Citrus Fruits	G	Margarine	G	Sulfuric Acid, above 40%	C	supplemented by in-service testing. The data	
Clorox or Clorox 2 Liquid	E	Methyl Alcohol	C	Sulfurous Acid	G	furnished in the tables may be revised on the	
Coffee	G	Methyl Ethyl Ketone	N	Tannic Acid	C	basis of further testing.	
Copper Chloride, Nitrate, Sulfate	E	Methylene Chloride	N	Tartaric Acid	C		
Corn Oil	E	Milk	G	Tea	G		
Corn Syrup	G	Mineral Oil	G	Toluene	N		
Egg Yolk	G	Mineral Spirits	E	Toluene Sulfonic Acid, 10%	G		
Ethyl Acetate	N	Molasses	F	Tomato Juice	G		
Ethyl Alcohol	C	Muriatic Acid	G	Trichloroethylene	N		
Ethyl Ether	N	Mustard	G	Trisodium Phosphate	E		
Ethylene Dichloride	N	Nickel Chloride, Nitrate, Sulfate	E	Tung Oil	N		
Ethylene Glycol	E	Nitric Acid, to 5%	G	Turpentine	C		