



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

UREKLAD PRIMER

1-Quart Unit (2 lb. 10 oz. [1.2 kg.]) Consisting of:

One - 1-qt. can of Component A (1 lb. 15 oz. [879 g.])

One - 1-pt. can of Component B (11 oz. [312 g.])

Coverage: Approx. 96 sq. ft. (8.9 m²) per unit

1-1/2-Gal. Unit (10 lb. 10 oz. [4.8 kg.]) Consisting of:

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

One - 1/2-gal. can of Component B (2 lb. 12 oz. [1.2 kg.])

Coverage: Approx. 400 sq. ft. (37.2 m²) per unit

REZKLAD® E-CONCRETE PRIMER

REZKLAD E-CONCRETE PRIMER is used in place of UREKLAD PRIMER to prevent odor contamination.

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	
		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 - 200°F (-24°C - 95°C)	-10°F - 200°F (-24°C - 95°C)
Hardness, Shore A		90	90

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.

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

ESTIMATING 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	72
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.

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

UREKLAD PRIMER is the standard primer for use with UREKLAD JOINT SEALANT and UREKLAD JOINT SEALANT VERTICAL GRADE. However, odors from uncured UREKLAD PRIMER may contaminate certain food products or be offensive to personnel. Removal of food products may be necessary during the installation and cure. Evacuate odors to exterior environment and restrict odors from circulating throughout the building.

UREKLAD PRIMER

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.
- Combine the contents of the can of UREKLAD PRIMER Component B and the can of UREKLAD PRIMER 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.
- Apply UREKLAD PRIMER with a brush. Allow to dry. Refer to the "Typical Drying Times" chart. Install the expansion joint within 24 hours.

TYPICAL DRYING TIMES OF THE UREKLAD PRIMER

Air/Substrate Temperature	Drying Time
65°F (18°C)	3 hours
77°F (25°C)	2 hours
95°F (35°C)	1 hour

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

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.

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.

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 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 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 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 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	(8-00 ²)	
Benzene	N	Horse Radish	G	Potassium Bicarbonate, Carbonate	E		
Benzene Sulfonic Acid, 10%	G	Hydrobromic Acid, to 20%	G	Potassium Chloride, Nitrate, Sulfate	E		
Benzoic Acid	G	Hydrochloric Acid, to 20%	G	Potassium Hydroxide, to 50%	F		
Black Liquor	G	Hydrochloric Acid, above 20%	C	Salad Oils	E		
Boric Acid	E	Hydrofluoric Acid, to 20%	G	Salicylic Acid	F		
Bromine Water	C	Hydrofluoric Acid, above 20%	C	Shortening	G		
Butter	G	Hydrofluosilicic Acid, to 20%	G	Silver Nitrate	E		
Butyl Acetate	N	Hydrogen Peroxide	E	Skydrol	N		
Butyl Alcohol	F	Hypocholeous Acid, to 5%	G	Smokehouse Residues	N		
Butyric Acid	N	Ice Cream	G	Sodium Bicarbonate, Carbonate	E		
Calcium Chloride, Nitrate, Sulfate	E	Jams & Jellies	F	Sodium Bisulfate, Sulfate	G		
Calcium Hydroxide	G	Jet Fuel	N	Sodium Chloride, Nitrate, Phosphate	E		
Calcium Hypochlorite	F	Kerosene	N	Sodium Hydroxide, to 25%	G		
Carbonated Water	E	Ketchup	G	Sodium Hydroxide, 25% to 50%	F		
Casein	G	Lactic Acid, to 10%	G	Sodium Hypochlorite	E		
Cheese, all	N	Lactic Acid, above 10%	C	Sodium Sulfide, Sulfite	G		
Chlorine, Dry or Wet	N	Lard	G	Sodium Thiosulfate	E		
Chlorine Water	G	Linseed Oil	N	Soft Drink Concentrates	F		
Chloroacetic Acid, to 10%	C	Lux Liquid	E	Soft Drinks	E		
Chloroform	N	Magnesium Chloride, Nitrate, Sulfate	E	Soups	G		
Chromic Acid, to 5%	G	Magnesium Hydroxide	E	Soya Oil	C		
Chromic Acid, 5% to 10%	F	Maleic Acid, 25%	C	Stearic Acid	F		
Cider	G	Malt	F	Sugar, Saturated Solution	F		
Citric Acid, to 10%	G	Malt Liquors	F	Sulfuric Acid, to 40%	E		
Citrus Fruits	G	Margarine	G	Sulfuric Acid, above 40%	C		
Clorox or Clorox 2 Liquid	E	Methyl Alcohol	C	Sulfurous Acid	G		
Coffee	G	Methyl Ethyl Ketone	N	Tannic Acid	C		
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		

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 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 UREKLAD JOINT SEALANT or UREKLAD JOINT SEALANT VERTICAL GRADE 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.