



Atlas Minerals & Chemicals, Inc.



DATA SHEET

4-30PI (12-23)
Supersedes 4-30PI (6-23)

ATLASTIC® CT-30 Membrane

DESCRIPTION

ATLASTIC CT-30 is a trowel applied, chemical resistant and waterproofing membrane.

TYPICAL USES

ATLASTIC CT-30 Membrane is a room temperature curing elastomer which can be applied to concrete, ferrous and non-ferrous metals or wood. It is an excellent membrane system when used in conjunction with masonry brick construction, as a cleavage membrane or as a waterproofing membrane.

ATLASTIC CT-30 has a low odor which permits installation in operating facilities without special ventilation. For industrial and commercial applications exposed to temperature fluctuations, ATLASTIC CT-30 maintains its flexibility at temperatures as low as -10°F (-24°C) with an upper thermal limit of 200°F (93°C). ATLASTIC CT-30 may also be used as an expansion joint sealant for masonry construction and resinous floor toppings. For additional information, refer to ATLASTIC CT-30 Joint Sealant, Data Sheet 3-44PI.

CHEMICAL RESISTANCE

ATLASTIC CT-30 is resistant to many organic and inorganic acids, alkalis and salts. Refer to the chemical resistance chart for specific information.

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

Coverage as Conductive Primer: Approx. 60 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

Coverage as Conductive Primer: Approx. 210 sq. ft. (19.5 m²) per unit

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ASTM C905	62.5 lb./cu. ft. (1.00 g./cc.)
Tensile Strength, 7 days @ 77°F (25°C)	ASTM D412	250 psi. (1.72 MPa)
Tensile Strength, 7 days @ 77°F (25°C)	ASTM D412	300%
Hardness, Shore A	ASTM D2240	30-40
Maximum Service Temp.	—	200°F (93°C)
Specific Permeability	ASTM D1653	0.005

ATLASTIC CT-30 Horizontal Grade

1-Gallon Unit (7 lb. 8 oz. [3.4 kg.]) Consisting of:

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

One - 1-qt. can of Component B (1 lb. 8 oz. [680 g.])

Coverage: 48 sq. ft. (4.5 m²) @ 30 mils
24 sq. ft. (2.2 m²) @ 60 mils

5-Gallon Unit (40 lb. [18.1 kg.]) Consisting of:

One - 5-gal. pail of Component A (32 lb. [14.5 kg.])

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

Coverage: 256 sq. ft. (23.8 m²) @ 30 mils
128 sq. ft. (11.9 m²) @ 60 mils

ATLASTIC CT-30 Vertical Grade

1-Gallon Unit (7 lb. 3 oz. [3.3 kg.]) Consisting of:

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

One - 1-qt. can of Component B (1 lb. 3 oz. [539 g.])

Coverage: 46 sq. ft. (4.3 m²) @ 30 mils
23 sq. ft. (2.1 m²) @ 60 mils

5-Gallon Unit (37 lb. 8 oz. [17.0 kg.]) Consisting of:

One - 5-gal. pail of Component A (31 lb. 8 oz. [14.3 kg.])

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

Coverage: 240 sq. ft. (22.3 m²) @ 30 mils
120 sq. ft. (11.1 m²) @ 60 mils

SURFACE PREPARATION

ATLASTIC CT-30 can be applied to concrete, metal and wood surfaces. 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.

Concrete: Finished concrete must be free of ridges, protrusions, fins, mortar splatter and have a tight laitance-free steel trowel finish. Abrasive grit blasting

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.

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.

Wood: The surfaces are to be dry and sap-stain free. For additional information, refer to Surface Preparation, Data Sheet PS-30.

TEMPERATURE DURING APPLICATION

Store ATLASTIC CT-30 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 and materials are between 60°F (16°C) and 85°F (29°C).

MIXING 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. Refer to REZKLAD E-CONCRETE PRIMER Data Sheet 7-22PI for complete mixing and application instructions.

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

Temperature	Working Time	Tack Free	Maximum Drying Time
60°F (16°C)	35 min.	24 hrs.	48 hrs.
75°F (24°C)	25 min.	16 hrs.	48 hrs.
85°F (29°C)	15 min.	12 hrs.	24 hrs.

MIXING OF THE ATLASTIC CT-30

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.

Note: A double mixing procedure is required to ensure complete blending of the components.

1-Gallon Units

- Individually stir the contents of both the Component A and Component B cans for approximately one minute prior to blending the components.
- Pour the entire contents of the Component B can into the Component A can. Scrape along the sides and bottom of the can to remove all of the contents.
- 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 plastic or metal pail. Scrape the sides and bottom of the Component A can to remove all of the contents.
- Continue mixing the ATLASTIC CT-30 components for an additional two minutes.

5-Gallon Units

- Individually stir the contents of both the Component A pail and Component B can for approximately one minute prior to blending the components.
- Evenly divide the contents of the 5-gallon pail of Component A into two equal parts by volume using two clean, dry 5-gallon pails. Scrape along the sides and bottom of the pail to remove all of the contents.
- Evenly divide the contents of the 1-gallon can of Component B into two equal parts by volume using two clean, dry 1-gallon cans. Scrape along the sides and bottom of the can to remove all of the contents.
- Pour the entire contents of one of the Component B cans into one of the Component A pails.
- Mix the combined components for approximately two minutes. While mixing, scrape along the sides and bottom of the pail to ensure complete mixing of the two components.
- Transfer the mixture into another clean plastic or metal pail. Scrape the sides and bottom of the pail to remove all of the contents.
- Continue mixing the ATLASTIC CT-30 components for an additional two minutes.

APPLICATION OF THE ATLASTIC CT-30

Two coats of ATLASTIC CT-30 are required to attain a thickness of 60 mils. The application of a second coat of ATLASTIC CT-30 seals any pinholes or holidays that may result from the application of a single coat.

- Apply REZKLAD E-CONCRETE PRIMER with a brush or paint roller making sure to work it into the pores of the concrete. Do not allow puddling. Reprime areas in which the primer has absorbed into the substrate as evident by a dull finish. 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.
- Apply ATLASTIC CT-30 Horizontal Grade with a 1/16" V-notched trowel or ATLASTIC CT-30 Vertical Grade with a flat cement finisher's trowel. Place sufficient amount of material to provide a continuous first coat equal to one half of the finished coat thickness.
- Allow the first coat to dry. Refer to the "Typical Working & Drying Times of the ATLASTIC CT-30" chart for specific information.

MIX RATIO CHART - ATLASTIC CT-30

ATLASTIC CT-30 Horizontal Grade	Weight	Volume
ATLASTIC CT-30 Horizontal Grade Component A	6 lb. (2.7 kg.)	94 fl. oz. (2.78 liters)
ATLASTIC CT-30 Horizontal Grade Component B	1 lb. 8 oz. (680 g.)	20 fl. oz. (0.60 liters)
Batch Size	7 lb. 8 oz. (3.4 kg.)	0.12 cu. ft. (3.40 liters)

ATLASTIC CT-30 Vertical Grade	Weight	Volume
ATLASTIC CT-30 Vertical Grade Component A	6 lb. (2.7 kg.)	85 fl. oz. (2.50 liters)
ATLASTIC CT-30 Vertical Grade Component B	1 lb. 3 oz. (539 g.)	16 fl. oz. (0.47 liters)
Batch Size	7 lb. 3 oz. (3.3 kg.)	0.12 cu. ft. (3.40 liters)

TYPICAL WORKING & DRYING TIMES OF THE ATLASTIC CT-30

Temperature	Working Time	Support Foot Traffic
65°F (18°C)	50 minutes	24 hours
75°F (24°C)	30 minutes	16 hours
85°F (29°C)	20 minutes	12 hours

- d. Wipe the surface of the dry ATLASTIC CT-30 with xylene to remove the naturally-occurring blush.
- e. Apply a second coat of ATLASTIC CT-30.
- f. Protect ATLASTIC CT-30 from water or other contaminants until it is dry.

INSTALLATION OF BRICK PAVER FLOOR OVER THE ATLASTIC CT-30 MEMBRANE**Procedure 1: Epoxy Setting Bed**

Tile 1/2" thick or greater is required. For floor systems subjected to heavy cart or fork lift traffic, a minimum paver thickness of 1-3/16" is required.

- a. Wipe the surface of the previously applied 60 mil ATLASTIC CT-30 Membrane with xylene.
- b. Apply a coat of REZKLAD® E-CONCRETE PRIMER and allow to dry. (REZKLAD E-CONCRETE PRIMER: 1/2 gallon unit covers 100 sq. ft.; 1-1/2 gallon unit covers 350 sq. ft.). Drying time is approximately 8 hours at 75°F (24°C).
- c. Apply a bond coat of RED FURNANE SETTING BED and set the pavers. For additional information, refer to RED FURNANE SETTING BED / SETTING BED VERTICAL GRADE, Data Sheet 5-55PI.

Procedure 2: Furan, Epoxy or Phenolic Setting Beds

A minimum paver thickness of 1-3/16" is required.

- a. Wipe the surface of the previously applied 60 mil ATLASTIC CT-30 Membrane with xylene.
- b. Apply a 15 mil coat of ATLASTIC CT-30 and broadcast ATLAS® AGGREGATE NO. 8 in excess into the wet ATLASTIC CT-30. (ATLAS AGGREGATE NO. 8: 50 lb. bag covers approximately 70 sq. ft.).

- c. Allow the 15 mil coat of ATLASTIC CT-30 to cure. Remove excess aggregate by sweeping or vacuuming.
- d. Apply the mortar bond coat and set the pavers.

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 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 membrane shall be ATLASTIC CT-30 as manufactured by Atlas Minerals & Chemicals, Inc. and shall be resistant to organic and inorganic acids, alkalies and salts.

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 ATLASTIC® CT-30 (4-30PI)

	80°F	150°F
Acetaldehyde	C	C
Acetic Acid, to 10%	R	R
Acetic Acid, 10% to 20%	C	N
Acetic Acid, above 20%	N	N
Alum or Aluminum Sulfate	R	R
Aluminum Chloride, Nitrate	R	R
Ammonium Chloride, Nitrate, Sulfate	R	R
Ammonium Hydroxide, to 10%	R	R
Amyl Acetate	N	N
Amyl Alcohol	R	R
Aniline	N	N
Aqua Regia	N	N
Barium Chloride, Nitrate, Sulfate	R	R
Barium Hydroxide	R	R
Barium Sulfide	C	N
Benzene	N	N
Benzene Sulfonic Acid, 10%	R	R
Benzoic Acid	R	R
Boric Acid	R	R
Bromine Water	N	N
Butyl Acetate	N	N
Butyl Alcohol	R	R
Butyric Acid	N	N
Cadmium Chloride, Nitrate, Sulfate	R	R
Calcium Bisulfite	R	R
Calcium Chloride, Nitrate, Sulfate	R	R
Calcium Hydroxide	R	R
Carbon Disulfide	N	N
Carbon Tetrachloride	N	N
Chlorine Dioxide, Water Solution	N	N
Chlorine, Dry	R	R
Chlorine, Wet	R	C
Chlorine Water	R	R
Chloroacetic Acid, to 10%	N	N
Chlorobenzene	N	N
Chloroform	N	N
Chromic Acid, to 10%	R	C
Chromic Acid, above 10%	N	N
Citric Acid, to 10%	R	R
Copper Chloride, Nitrate, Sulfate	R	R
Dichloroacetic Acid, 10%	N	N
Dichlorobenzene	N	N
Diethyl Ether	N	N
Ethyl Acetate, Sulfate	N	N
Ethyl Alcohol	R	R
Ethylene Dichloride	N	N
Ethylene Glycol	R	R
Fluosilicic Acid	R	R

	80°F	150°F
Formaldehyde	C	C
Formic Acid	C	N
Gasoline	N	N
Glycerine	R	R
Gold Cyanide	R	R
Hexane	N	N
Hydrobromic Acid	R	R
Hydrochloric Acid	R	R
Hydrocyanic Acid	R	R
Hydrofluoric Acid	R	R
Hydrofluosilicic Acid	R	R
Hydrogen Peroxide	C	C
Hydrogen Sulfide Gas, Dry or Wet	R	R
Iron Chloride, Nitrate, Sulfate	R	R
Isopropyl Ether	N	N
Kerosene	N	N
Lactic Acid	R	R
Lead Acetate, Nitrate	R	R
Linseed Oil	N	N
Magnesium Chloride, Nitrate, Sulfate	R	R
Magnesium Hydroxide	R	R
Maleic Acid	R	C
Mercuric Acetate	N	N
Methyl Acetate, Sulfate	N	N
Methyl Alcohol	R	R
Methyl Ethyl Ketone	N	N
Mineral Oil	N	N
Mineral Spirits	N	N
Muriatic Acid	R	R
Nickel Chloride, Nitrate, Sulfate	R	R
Nitric Acid, to 5%	R	R
Nitric Acid, 20%	R	C
Nitric Acid, 40%	N	N
Nitrobenzene	N	N
Oleic Acid	C	N
Oxalic Acid	R	R
Perchloric Acid	N	N
Phenol, to 5%	N	N
Phosphoric Acid, to 40%	R	R
Phosphorous Acid	R	R
Phosphorous Trichloride	R	R
Phthalic Acid	R	R
Potassium Bicarbonate, Carbonate	R	R
Potassium Chloride, Nitrate, Sulfate	R	R
Potassium Cyanide	R	R
Potassium Ferricyanide, Ferrocyanide	R	R
Potassium Hydroxide, to 30%	R	R
Potassium Hydroxide, above 30%	C	N

	80°F	150°F
Pyridine	N	N
Rochelle Salt	R	R
Salicylic Acid	R	R
Silver Nitrate	R	R
Sodium Acetate	R	R
Sodium Bicarbonate, Carbonate	R	R
Sodium Chloride, Nitrate, Sulfate	R	R
Sodium Cyanide	R	R
Sodium Hydroxide, to 30%	R	R
Sodium Hydroxide, above 30%	C	N
Sodium Hypochlorite, to 3%	C	C
Sodium Hypochlorite, above 3%	N	N
Sodium Sulfide	C	C
Sodium Sulfite, Thiosulfate	R	R
Soya Oil	N	N
Stearic Acid	R	N
Sulfur Dioxide Gas, Dry or Wet	R	R
Sulfur Trioxide Gas, Dry	R	R
Sulfur Trioxide Gas, Wet	N	N
Sulfuric Acid, to 50%	R	R
Sulfuric Acid, above 50%	N	N
Sulfurous Acid	R	R
Tannic Acid	R	R
Tartaric Acid	R	R
Tin Chloride, Sulfate	R	R
Toluene	N	N
Trichloroethylene	N	N
Trisodium Phosphate	R*	C*
Tung Oil	N	N
Urea	R	R
Xylene	N	N
Zinc Chloride, Nitrate, Sulfate	R	R

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KEY

R - Recommended

N - Not Recommended

C - Conditional; May be serviceable if the contaminant is immediately removed or washed off the surface.

* - For flooring application only.

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. 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.