



## 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 150°F (66°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, alkalies and salts. Refer to the chemical resistance chart for specific information.

### PACKAGING AND COVERAGE

#### ATLASTIC CT-30 PRIMER

1-gallon can (10 lb. [4.5 kg.])

Coverage: 200 to 250 sq. ft. (18.6 to 23.2 m<sup>2</sup>) per can

5-gallon pail (50 lb. [22.7 kg.])

Coverage: 1,000 to 1,250 sq. ft. (92.9 to 110 m<sup>2</sup>) per pail

#### 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 m<sup>2</sup>) @ 30 mils

24 sq. ft. (2.2 m<sup>2</sup>) @ 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 m<sup>2</sup>) @ 30 mils

128 sq. ft. (11.9 m<sup>2</sup>) @ 60 mils

## 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 Elongation, 7 days @ 77°F (25°C)	ASTM D412	300%
Hardness, Shore A	ASTM D2240	30-40
Maximum Service Temp.		150°F (66°C)
Specific Permeability	ASTM D1653	0.005

### 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 m<sup>2</sup>) @ 30 mils

23 sq. ft. (2.1 m<sup>2</sup>) @ 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 m<sup>2</sup>) @ 30 mils

120 sq. ft. (11.1 m<sup>2</sup>) @ 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 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 ATLASTIC CT-30 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 ATLASTIC CT-30 and ATLASTIC CT-30 PRIMER are between 60°F (16°C) and 85°F (29°C).

Minimum temperature for installation is 45°F (7°C). At temperatures below 45°F (7°C), the product may not set or cure properly.

**MIXING OF THE ATLASTIC CT-30 PRIMER**

ATLASTIC CT-30 PRIMER is a one component product. Stir the ATLASTIC CT-30 PRIMER with a hand drill equipped with a "Jiffy" type mixer at a mixing speed between 300 and 500 RPM.

**TYPICAL DRYING TIMES OF THE ATLASTIC CT-30 PRIMER**

Temperature	Drying Time
65°F (18°C)	4 hours
75°F (24°C)	2 hours
85°F (29°C)	1-1/2 hours

**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.

**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)
<b>Batch Size</b>	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)
<b>Batch Size</b>	7 lb. 3 oz. (3.3 kg.)	0.12 cu. ft. (3.40 liters)

**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 ATLASTIC CT-30 PRIMER to the prepared substrate with a brush or short nap roller. Do not allow puddling. Allow the ATLASTIC CT-30 PRIMER to dry. Refer to the "Typical Drying Times of the ATLASTIC CT-30 Primer" chart for specific information.

- b. 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.
- c. Allow the first coat to dry. Refer to the "Typical Working & Drying Times of the ATLASTIC CT-30" chart for specific information.
- 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.

#### 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

#### INSTALLATION OF BRICK PAVER FLOOR OVER THE ATLASTIC CT-30 MEMBRANE

##### Procedure 1: Epoxy Setting Bed

Quarry 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, 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: 100 lb. bag covers approximately 140 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 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 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 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.**

**Note:** Atlas makes it a practice to continuously update and enhance our CCM (Corrosion Resistant Construction Materials) products. This may result in slight discrepancies between our printed Data Sheets and the current version. For the most recent version of any Data Sheet, please visit our Web site at [www.atlasmin.com](http://www.atlasmin.com).

## CHEMICAL RESISTANCE OF ATLASTIC® CT-30 (4-30PI)

	80°F	150°F		80°F	150°F		80°F	150°F
Acetaldehyde	C	C		R	R		Potassium Hydroxide, to 30%	R
Acetic Acid, to 10%	R	R		C	C		Potassium Hydroxide, above 30%	C
Acetic Acid, 10% to 20%	C	N		C	N		Pyridine	N
Acetic Acid, above 20%	N	N		N	N		Rochelle Salt	R
Alum or Aluminum Sulfate	R	R		R	R		Salicylic Acid	R
Aluminum Chloride, Nitrate	R	R		R	R		Silver Nitrate	R
Ammonium Chloride, Nitrate, Sulfate	R	R		N	N		Sodium Acetate	R
Ammonium Hydroxide, to 10%	R	R		R	R		Sodium Bicarbonate, Carbonate	R
Amyl Acetate	N	N		R	R		Sodium Chloride, Nitrate, Sulfate	R
Amyl Alcohol	R	R		R	R		Sodium Cyanide	R
Aniline	N	N		R	R		Sodium Hydroxide, to 30%	R
Aqua Regia	N	N		R	R		Sodium Hydroxide, above 30%	C
Barium Chloride, Nitrate, Sulfate	R	R		C	C		Sodium Hypochlorite, to 3%	C
Barium Hydroxide	R	R		R	R		Sodium Hypochlorite, above 3%	N
Barium Sulfide	C	N		R	R		Sodium Sulfide	C
Benzene	N	N		N	N		Sodium Sulfite, Thiosulfate	R
Benzene Sulfonic Acid, 10%	R	R		N	N		Soya Oil	N
Benzoic Acid	R	R		R	R		Stearic Acid	N
Boric Acid	R	R		R	R		Sulfur Dioxide Gas, Dry or Wet	R
Bromine Water	N	N		N	N		Sulfur Trioxide Gas, Dry	R
Butyl Acetate	N	N		R	R		Sulfur Trioxide Gas, Wet	N
Butyl Alcohol	R	R		R	R		Sulfuric Acid, to 50%	R
Butyric Acid	N	N		R	C		Sulfuric Acid, above 50%	N
Cadmium Chloride, Nitrate, Sulfate	R	R		N	N		Sulfurous Acid	R
Calcium Bisulfite	R	R		N	N		Tannic Acid	R
Calcium Chloride, Nitrate, Sulfate	R	R		R	R		Tartaric Acid	R
Calcium Hydroxide	R	R		N	N		Tin Chloride, Sulfate	R
Carbon Disulfide	N	N		N	N		Toluene	N
Carbon Tetrachloride	N	N		N	N		Trichloroethylene	N
Chlorine Dioxide, Water Solution	N	N		R	R		Trisodium Phosphate	R*
Chlorine, Dry	R	R		R	R		Tung Oil	N
Chlorine, Wet	R	C		R	R		Urea	R
Chlorine Water	R	R		R	C		Xylene	N
Chloroacetic Acid, to 10%	N	N		N	N		Zinc Chloride, Nitrate, Sulfate	R
Chlorobenzene	N	N		N	N			
Chloroform	N	N		C	n			
Chromic Acid, to 10%	R	C		R	R			
Chromic Acid, above 10%	N	N		N	N			
Citric Acid, to 10%	R	R		N	N			
Copper Chloride, Nitrate, Sulfate	R	R		R	R			
Dichloroacetic Acid, 10%	N	N		R	R			
Dichlorobenzene	N	N		R	R			
Diethyl Ether	N	N		R	R			
Ethyl Acetate, Sulfate	N	N		R	R			
Ethyl Alcohol	R	R		R	R			
Ethylene Dichloride	N	N		R	R			
Ethylene Glycol	R	R		R	R			
Fluosilicic Acid				R	R			
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			

**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.