



Atlas Minerals & Chemicals, Inc.



DATA SHEET

3-44PI (10-98²)
Supersedes 3-44PI (1-98)

ATLASTIC[®] CT-30 Joint Sealant (formerly Atlastic[®] 20 Joint Sealant)

DESCRIPTION

ATLASTIC CT-30 is a chemical resistant, expansion joint sealant.

TYPICAL USES

ATLASTIC CT-30 is an expansion joint sealant for quarry tile, brick, concrete and resinous floor topping installations. It can also be used as a sealant between substrates and ferrous, galvanized or aluminum metal structures, such as drains and grating seats. ATLASTIC CT-30 maintains flexibility at temperatures as low as 10°F (-12°C) and can withstand operating temperatures as high as 150°F (66°C).

ATLASTIC CT-30 may also be used as a membrane system in conjunction with masonry brick construction, as a cleavage membrane or as a waterproofing membrane. For additional information, refer to ATLASTIC CT-30 Membrane, Data Sheet 4-30PI.

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

THIOMENT PRIMER

1-quart can (1 lb. 12 oz. [794 g.])
Coverage: 450 linear feet (137 m.) per can

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: Approx. 198 cu. in. (3,240 cm³) per unit

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: Approx. 198 cu. in. (3,240 cm³) per unit

AVAILABLE COLORS

ATLASTIC CT-30 Joint Sealant is available in black only.

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)

ESTIMATING TABLE OF THE ATLASTIC CT-30*

Joint Width	Linear Feet per Unit Joint Depth			
	1/4"	3/8"	1/2"	3/4"
1/4"	264 ft.	176 ft.	132 ft.	88 ft.
3/8"	176 ft.	117 ft.	88 ft.	58 ft.
1/2"	132 ft.	88 ft.	66 ft.	44 ft.
3/4"	88 ft.	58 ft.	44 ft.	29 ft.

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

SURFACE PREPARATION

The substrate must be structurally sound, clean, dry and free of all contaminants such as sealers, curing compounds, coatings, oil, dirt, dust and water.

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 ATLASTIC CT-30 and THIOMENT 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, ATLASTIC CT-30 and THIOMENT PRIMER are between 65°F (18°C) and 85°F (29°C).

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 OF THE THIOMENT PRIMER

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

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.

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)

MIXING OF THE ATLASTIC CT-30

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.
- 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 combined components for approximately two minutes.

APPLICATION OF THE ATLASTIC CT-30

- Apply duct tape or masking tape to top surface of the substrate adjacent to both sides of the joint.
- To the prepared substrate, brush apply a uniform coat of THIOMENT PRIMER. Allow the THIOMENT PRIMER to dry.
- ATLASTIC CT-30 may be poured into the joint using a convenient size container or injected using a caulking gun and tube.
- Use a putty knife or mason's trowel to level and remove excess material.
- Immediately after leveling the joint material, remove the previously placed tape.
- Protect the ATLASTIC CT-30 from water or other contaminants until it can support foot traffic.

TYPICAL WORKING AND CURE TIMES OF THE ATLASTIC CT-30

Temperature	Working Time	Support Foot Traffic
65°F (18°C)	50 minutes	16 hours
75°F (24°C)	30 minutes	12 hours
85°F (29°C)	20 minutes	8 hours

TYPICAL DRYING TIMES OF THE THIOMENT PRIMER

Temperature	Drying Time
65°F (18°C)	3 hours
75°F (24°C)	2 hours
85°F (29°C)	1-1/2 hours

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 joint sealant shall be ATLASTIC CT-30 as manufactured by Atlas Minerals & Chemicals, Inc. The joint sealant 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.**

CHEMICAL RESISTANCE OF ATLASTIC® CT-30 JOINT SEALANT (3-44PI)

	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	—
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	—
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	C	N
Tung Oil	N	N
Urea	R	R
Xylene	N	N
Zinc Chloride, Nitrate, Sulfate (10-98 ²)	R	R

KEY

R - Recommended

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. 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.