



Atlas Minerals & Chemicals, Inc.



DATA SHEET

3-65PI (9-04)
Supersedes 3-65PI (8-00²)

CHEMJOINT Sealant

DESCRIPTION

CHEMJOINT is a chemical resistant expansion joint sealant.

TYPICAL USES

CHEMJOINT is a one component, caulking grade expansion joint sealant for quarry tile, brick 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. CHEMJOINT will stay flexible indefinitely. The consistency of CHEMJOINT allows application in both horizontal and vertical joints. CHEMJOINT is excellent for outdoor service conditions and can be installed at temperatures between 30°F (-1°C) and 120°F (49°C). CHEMJOINT is certifiable for use in USDA inspected facilities.

CHEMICAL RESISTANCE

CHEMJOINT is resistant to mild acids, alkalis, salts, detergents, alcohols and aliphatic hydrocarbons. Refer to the chemical resistance chart for specific information.

PACKAGING AND COVERAGE

CHEMJOINT Sealant

10.3 fluid ounce cartridge

Coverage: Approx. 18 cu. in. (295 cm³) per cartridge

THIOMENT PRIMER

When using CHEMJOINT Sealant with concrete or marble, the sides of the joint should be primed with THIOMENT PRIMER.

THIOMENT PRIMER

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

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

AVAILABLE COLORS

CHEMJOINT Sealant is available in black only.

SURFACE PREPARATION

CHEMJOINT Sealant 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 and dust.

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ASTM C905	64.4 lb./cu. ft. (1.03 g./cc.)
Tensile Strength, 7 days @ 77°F (25°C)	ASTM D412	300 psi. (2.07 MPa)
Tensile Elongation, 7 days @ 77°F (25°C)	ASTM D412	480%
Hardness, Shore A	ASTM D2240	20-25
Maximum Service Temp.		450°F (232°C)

ESTIMATING OF THE CHEMJOINT*

Joint Width	Linear Feet per Cartridge Joint Depth			
	1/4"	3/8"	1/2"	3/4"
1/4"	24 ft.	16 ft.	12 ft.	8 ft.
3/8"	16 ft.	10 ft.	8 ft.	5 ft.
1/2"	12 ft.	8 ft.	6 ft.	4 ft.
3/4"	8 ft.	5 ft.	4 ft.	2 ft.

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

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 CHEMJOINT Sealant 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, CHEMJOINT Sealant and THIOMENT PRIMER are between 65°F (18°C) and 85°F (29°C). Minimum temperature for installation is 30°F (-1°C).

MIXING OF THE THIOMENT PRIMER

THIOMENT PRIMER is used only when CHEMJOINT Sealant is applied to concrete or marble substrates.

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.

TYPICAL DRYING TIMES OF THE THIOMENT 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

APPLICATION OF THE CHEMJOINT

- Apply duct tape or masking tape to top surface of the substrate adjacent to both sides of the joint.
- To the prepared substrate, apply the CHEMJOINT Sealant using a standard caulking gun.

Note: Brush apply THIOMENT PRIMER only when CHEMJOINT Sealant is applied to concrete or marble substrates. Allow the THIOMENT PRIMER to dry prior to application of the CHEMJOINT Sealant.

- 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 CHEMJOINT from water or other contaminants until it can support foot traffic.

TYPICAL SETTING TIMES OF THE CHEMJOINT

Temperature	Support Foot Traffic
35°F (2°C)	12 hours
45°F (7°C)	8 hours
55°F (13°C)	7 hours
65°F (18°C)	6 hours
75°F (24°C)	4 hours
85°F (29°C)	3 hours

CLEANING OF EQUIPMENT

Solvents such as methyl ethyl ketone, toluene or xylene can be used before the material has begun to harden. Cured material may be scraped or pulled off non-porous surfaces.

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 six months.

PRODUCT SPECIFICATION

The system shall be CHEMJOINT as manufactured by Atlas Minerals & Chemicals, Inc. The joint sealant shall be certifiable for use in USDA inspected facilities.

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 CHEMJOINT SEALANT (3-65PI)

	80°F	150°F
Acetaldehyde	C	C
Acetic Acid, to 10%	R	R
Acetic Acid, Glacial	N	N
Alum or Aluminum Sulfate	R	R
Aluminum Chloride, Nitrate, Sulfate	R	R
Ammonium Chloride, Nitrate, Sulfate	R	R
Ammonium Hydroxide, to 10%	R	C
Amyl Acetate	N	N
Amyl Alcohol	C	C
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	C
Carbon Disulfide	N	N
Carbon Tetrachloride	N	N
Chlorine Dioxide, Water Solution	N	N
Chlorine, Dry	R	R
Chlorine, Wet	R	C
Chlorine Water	C	C
Chloroacetic Acid, to 10%	N	N
Chlorobenzene	N	N
Chloroform	N	N
Chromic Acid, to 10%	R	C
Chromic Acid, 10% to 20%	C	N
Chromic Acid, above 20%	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	N	N
Ethyl Alcohol	R	R
Ethyl Sulfate	N	N
Ethylene Dichloride	N	N
Ethylene Glycol	R	R

	80°F	150°F
Fluosilicic Acid	N	N
Formic Acid	C	N
Gasoline	N	N
Glycerine	R	R
Gold Cyanide	R	R
Hexane	N	N
Hydrobromic Acid	R	R
Hydrochloric Acid	R	C
Hydrocyanic Acid	R	R
Hydrofluoric Acid	N	N
Hydrofluosilicic Acid	N	N
Hydrogen Peroxide	R	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	N	N
Methyl Alcohol	R	R
Methyl Ethyl Ketone	N	N
Methyl Sulfate	N	N
Mineral Oil	N	N
Mineral Spirits	N	N
Muriatic Acid	R	C
Nickel Chloride, Nitrate, Sulfate	R	R
Nitric Acid, to 5%	R	R
Nitric Acid, 5% to 20%	R	C
Nitric Acid, above 20%	N	N
Nitrobenzene	N	N
Oleic Acid	C	N
Oxalic Acid	R	R
Perchloric Acid, to 30%	N	N
Phenol, to 5%	N	N
Phosphoric Acid, to 40%	R	R
Phosphoric Acid, 40% to 85%	C	N
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

	80°F	150°F
Potassium Hydroxide, to 30%	R	C
Potassium Hydroxide, above 30%	C	N
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	C
Sodium Hydroxide, above 30%	C	N
Sodium Hypochlorite, to 3%	C	C
Sodium Hypochlorite, 3% to 15%	N	N
Sodium Sulfide	C	C
Sodium Sulfite	R	R
Sodium Thiosulfate	R	R
Soya Oil	N	N
Stearic Acid	C	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 80%	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

(9-04)

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.