



Atlas Minerals & Chemicals, Inc.



DATA SHEET

4-91PI (7-17)
Supersedes 4-91PI (6-08)

ATLAS® BARRIER SEALANT

DESCRIPTION

ATLAS BARRIER SEALANT is a modified basic zinc chromate / vinyl butyral wash applied to metal surfaces to improve adhesion between a metal substrate and a coating.

TYPICAL USES

ATLAS BARRIER SEALANT is applied to wire-brushed or grit blasted metal, such as the exterior of pickling tanks, reaction vessels, scrubbers, rinse tanks, tank cars and plating tanks, as well as structural members. ATLAS BARRIER SEALANT improves the adhesion of coatings to the substrate when grit blasting is impractical or when optimum adhesion is desired. ATLAS BARRIER SEALANT reacts with metal substrates, such as galvanized or clean steel, to form a rust-inhibiting film which can be painted. ATLAS BARRIER SEALANT can be used as a base for MEMBRANE 88, Data Sheet 4-31PI.

AVAILABLE COLORS

ATLAS BARRIER SEALANT is available in olive green only.

PACKAGING AND COVERAGE

ATLAS BARRIER SEALANT

1-Gallon Unit (7 lb. 9 oz. [3.4 kg.]) Consisting of:

One - 1-gal. can of ATLAS BARRIER SEALANT Base (6 lb. [2.7 kg.])

Two - bottles of ATLAS BARRIER SEALANT Accelerator (12.5 oz. [354 g.]) ea.

Coverage: Approx. 340 sq. ft. (31.6 m²) per unit @ 3 mils (0.8 mm.) to 5 mils (1.3 mm.) thickness

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

One - 5-gal. pail of ATLAS BARRIER SEALANT Base (29 lb. 10 oz. [13.4 kg.])

One - bottle of ATLAS BARRIER SEALANT Accelerator (7 lb. 14 oz. [3.6 kg.])

Coverage: Approx. 1,700 sq. ft. (158 m²) per unit @ 3 mils (0.8 mm.) to 5 mils (1.3 mm.) thickness

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
% Solids by weight, 3 hours @ 221°F (105°C)	ATM No. 14	18-21%
Viscosity @ 77°F (25°C)	ATM No. 40	300-800 cps.
Specific Gravity @ 77°F (25°C)	ATM No. 8	0.87-0.92
Temperature Resistance Continual		150°F (66°C)

TEMPERATURE DURING APPLICATION

Store ATLAS BARRIER SEALANT 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 ATLAS BARRIER SEALANT are between 60°F (16°C) and 85°F (29°C).

Minimum temperature for installation is 60°F (16°C).

SURFACE PREPARATION

ATLAS BARRIER SEALANT can be applied to metal surfaces. The substrate must be clean and dry. Grit blasting is recommended for best results. Where grit blasting is impractical, use a wire brush to remove all loose scale and rust.

For additional information, refer to Surface Preparation, Data Sheet PS-30.

MIXING AND APPLICATION OF THE

ATLAS BARRIER SEALANT Stir the contents of the individual base and accelerator containers prior to blending. Mixing of the components may 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.

The following mixing instructions are for a batch size of 0.5 gallons (0.38 liters) or 3 lb. 13 oz. (1.7 kg.). Estimated coverage of the batch size is 170 ft² (15.8 m²) @ 3 mils (0.08 mm.) to 5 mils (0.13 mm.). Proportionally increase or decrease component quantities to attain larger or smaller batch sizes.

- Combine 51 fluid ounces (1.5 liters) of ATLAS BARRIER SEALANT Base with 12.5 fluid ounces (0.38 liters) ATLAS BARRIER SEALANT Accelerator in a suitable mixing container.

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.

- b. Mix thoroughly for two minutes as described above.
- c. ATLAS BARRIER SEALANT can be applied by brush or roller within eight hours of mixing. Allow a minimum of four hours drying time at 70°F (21°C) before applying coating. **NEVER APPLY MORE THAN ONE COAT OF ATLAS BARRIER SEALANT.**

MIX RATIO OF THE ATLAS BARRIER SEALANT

	by Wt.	by Vol.
Atlas Barrier Sealant Base	100	100
Atlas Barrier Sealant Accelerator	26.5	25

APPLICATION OVER ASPHALT MEMBRANES

When applying a vinyl ester or polyester system over an asphalt membrane, apply a coat of ATLAS BARRIER SEALANT Base (without accelerator) by brush, roller or spray over the membrane. The coating will not be continuous and smooth. Allow to dry before proceeding. This will prevent bleed of the asphalt into the vinyl ester or polyester. Typical drying times of ATLAS BARRIER SEALANT Base are 2-1/2 hours at 65°F (18°C) or 1 hour at 85°F (29°C).

CLEANING OF TOOLS AND EQUIPMENT

Solvents, such as ethanol, 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 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 ATLAS BARRIER SEALANT 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 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.**