



Atlas Minerals & Chemicals, Inc.



DATA SHEET

8-58SU (1-99²)
Supersedes 8-58SU (5-98)

VITROBOND® POST SETTING COMPOUND

DESCRIPTION AND USES

VITROBOND is a plasticized, hot-pour, silica filled sulfur based mortar. It's a very strong material with excellent impact resistance and is unaffected by weathering. In the molten state, it's almost as fluid as water. VITROBOND is ideally suited for the permanent installation of ornamental iron railings, parking meters, fence posts, traffic marker, handrails, guardrails, etc. VITROBOND offers the following advantages:

- Ready-to-use, just melt and pour. No mixing or possibility of low strength from improper proportions.
- Two times stronger than concrete.
- Sets hard within minutes.
- No need for caulking to make a tight fit—ready-to-use as soon as it has cooled.
- Excellent adhesion to concrete and metals.
- No waste—what is melted but not used can be allowed to cool, then remelted later and used.
- Can be stored for years; will not deteriorate in any way.
- Inexpensive.
- Will not harm painted surfaces.

PACKAGING

50 lb. (22.7 kg.) cartons containing ingots

MIXING AND APPLICATION

Drill hole. It should be one inch larger diameter than post which is to be set. Carbaloy or other special concrete drills do a fast, clean job. Remove dust and loose particles with compressed air, a battery filler or a bulb syringe. Center post in hole. Break up ingots and place in a suitable clean, dry kettle. Melt over low heat, stirring occasionally with metal rod or ladle. Recommended pouring temperature is from 275°F (135°C) to 295°F (146°C). Use of a thermometer is suggested for best results. Discard material if heated above 320°F (160°C) or if ignited. Sulfur fires can be extinguished by covering with wet burlap to cut off air supply and removing heat source. If molten VITROBOND foams due to entrapped air, continue heating and stirring until smooth again. Pour using a small ladle or a can with the sides pinched to form a "V" pouring spout. Fill the hole in one continuous pour. At the end of the pour, the VITROBOND should be slightly above the surface of the concrete.

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ASTM C905	136 lb./cu. ft. (2.18 g./cc.)
Tensile Strength, 48 hours @ 77°F (25°C)	ASTM C307	700 psi. (4.83 MPa)
Compressive Strength, 48 hours @ 77°F (25°C)	ASTM C579	7,000 psi. (48.3 MPa)
Flexural Strength, 48 hours @ 77°F (25°C)	ASTM C580	1,800 psi. (12.4 MPa)
Coefficient of Thermal Exp., in./in./°F (cm./cm./°C)	ASTM C531	2.1 x 10 ⁻⁵ (3.8 x 10 ⁻⁵)
Shear Strength (in concrete), 4 days @ 77°F (25°C)	ATLAS	> 5,000 lb.* (2,268 kg.)
Strength Retained after Thermal Shock	ASTM C287	400 psi. (2.75 MPa)
Tend. of Aggregate to Settle, Max. Variation from Unity	ASTM C287	0.15
Color		Dark Gray

*More than 5,000 lb. is required to pull a 1/2" diameter pipe anchored into a 4" deep x 2.5" wide cylindrical hole in new concrete.

STORAGE

VITROBOND can be stored indefinitely without deterioration.

PRODUCT SPECIFICATION

The system shall be VITROBOND 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 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.**