Atlas Minerals & Chemicals, Inc.

DATA SHEET

8-57SU (10-23)

VITROBOND® HIGH STRENGTH CAPPING COMPOUND

DESCRIPTION AND USES

VITROBOND HIGH STRENGTH CAPPING COMPOUND is a mineral-filled, sulfur-based compound formulated for capping concrete test cylinders. It is easily melted, pours smoothly, possesses higher compressive strength and gives consistent test results. Atlas' sulfur-based capping compounds have been used for many years by independent testing laboratories, pre-stressed concrete structures manufacturers and federal, state and local testing agencies. This compound is suitable for running compressive strength tests upon high strength concrete. VITROBOND HIGH STRENGTH CAPPING COMPOUND offers the following advantages:

- Ready-to-use—just melt and pour. No mixing or possibility of low strength or erratic results from improper proportions.
- Does not require controlled room temperature or humidity conditions during pouring of caps.
- Does not require moist curing or other tedious handling procedures.
- Not affected by dry cylinders.
- Can be tested two hours after cooling.
- Virtually no settling in the melting pot, thus, results are uniform from cylinder to cylinder.

PACKAGING

Standard: 50 lb. (22.7 kg.) carton containing 5 lb. (2.3 kg.) ingots
Crushed: 50 lb. (22.7 kg.) bag

PREPARATION OF VITROBOND HIGH STRENGTH CAPPING COMPOUND

1. Break up ingots and place in a thermostatically controlled electrical melting pot. Melt the VITROBOND HIGH STRENGTH CAPPING COMPOUND, stirring occasionally with metal rod or ladle. Recommended pouring temperature range is from 275°F (135°C) to 295°F (146°C).
2. Do not heat above suggested pouring temperature. Ignition of the VITROBOND HIGH STRENGTH CAPPING COMPOUND could occur at temperatures above 320°F (160°C). If ignition occurs, turn off unit, and cover the melting pot. Burning will render VITROBOND HIGH STRENGTH CAPPING COMPOUND useless.
3. If molten VITROBOND HIGH STRENGTH CAPPING COMPOUND foams due to entrapped air or moisture, continue heating and stirring until smooth again.

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ASTM C905	136 lb/ft^3 (2.18 g/cc)
Tensile Strength, 48 hrs @ 77°F (25°C)	ASTM C307	> 1,000 psi (6.89 MPa)
Compressive Strength, 48 hrs @ 77°F (25°C)	ASTM C579	> 9,000 psi (62.1 MPa)
Compressive Strength, 2 hrs @ 77°F (25°C)	ASTM 617	> 8,000 psi (55.2 MPa)
Color	—	Dark Gray

PROCEDURE FOR USE

VITROBOND HIGH STRENGTH CAPPING COMPOUND caps are applied to the concrete test cylinder per ASTM C617. Contact ATLAS' Technical Service Department for information on simple devices for occasional capping. It is suggested that at least two rigs be prepared to avoid loss of time in testing. The base plates of the rig should be very lightly oiled or coated with silicone compound such as a 1% solution of General Electric Fluid SPFE or equal in toluene to facilitate removal of the cap. When silicone release agents are used, the rig should be allowed to stand approximately 30 minutes after coating before pouring caps. If oil is used, extreme care should be taken to see that there is not an excess of oil which would affect the VITROBOND HIGH STRENGTH CAPPING COMPOUND.

It is recommended that the base plate of the capping rig be preheated to retard the cooling rate of the VITROBOND HIGH STRENGTH CAPPING COMPOUND.

For the most consistent test results, it is suggested that the caps be applied using a vertical capper. Pour the molten VITROBOND HIGH STRENGTH CAPPING COMPOUND on the base plate of the rig and promptly place the cylinder into the molten

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.

1227 Valley Road, PO Box 38 ● Mertztown, PA 19539-0038 ● 800-523-8269 ● 610-682-7171 **FAX** 610-682-9200 **E-MAIL** sales@atlasmin.com

compound to a depth so that a cap of approximately 1/8" thick will be obtained. It is essential to ascertain that each cylinder is properly aligned so that the caps will be parallel. The cylinder may be removed as soon as the VITROBOND HIGH STRENGTH CAPPING COMPOUND has hardened, and the other end may then be capped. The specimen may be tested 2 hours after the final pouring, but not before. It is not necessary to carry out any moist curing before the tests are performed.

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). 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 VITROBOND HIGH STRENGTH CAPPING COMPOUND 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.**