



Atlas Minerals & Chemicals, Inc.



DATA SHEET

5-20PS (1-99)
Supersedes 5-20PS (2-98)

VITROBOND® SPECIFICATION

DESCRIPTION

The cement must contain at least 55% refined sulfur completely soluble in carbon disulfide and present primarily in the rhombic form. It must contain not less than 30% and not more than 41% of a properly selected aggregate. The aggregate must be at least 90% Silica and have a particle size so distributed as to give optimum physical properties. No clay, shale, brick dust, or similar fillers shall be used.

The cement must meet ASTM C287 for chemical resistant mortars and must show a weight change of less than 1% when 1" cubes are exposed to each of the following corrosive materials for 30 days at 150°F (66°C).

- 10% Chromic Acid
- 60% Acetic Acid
- 25% Sulfuric Acid
- 25% Hydrochloric Acid
- 10% Nitric Acid

PRODUCT SPECIFICATION

The system shall be VITROBOND as manufactured by Atlas Minerals & Chemicals, Inc.

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 | 500 psi., min. (3.45 MPa) |
| Compressive Strength, 48 hours @ 77°F (25°C) | ASTM C579 | 6,500 psi., min. (44.8 MPa) |
| Flexural Strength, 48 hours @ 77°F (25°C) | ASTM C580 | 1,500 psi. (10.3 MPa) |
| Coefficient of Thermal Exp. in./in./°F (cm./cm./°C) | ASTM C531 | 2.1 x 10 ⁻⁵ max. (3.8 x 10 ⁻⁵) |
| Water Absorption | ASTM C413 | 0.2% max. |
| Strength Retained after Thermal Shock | ASTM C287 | 400 psi., min. (2.75 MPa) |
| Tend. of Aggregate to Settle, Max. Variation from Unity | ASTM C287 | 0.15 |
| Color | — | Dark Gray |

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.