

# BLU-RAM® HS PLASTIC

## Product Information Sheet

## Monolithic Refractory

BLU-RAM® HS Plastic is a phos-bonded, mullite-based refractory with properties and performance characteristics comparable to 85% and 90% alumina-containing products. BLU-RAM® HS does not require forms during installation where anchors are present except for flat arch constructions.

**Service Temperature:** 3100 °F

**Material Required:** 171 lb/ft<sup>3</sup>

**Typical Water Required:** -

**Maximum Grain Size:** -

### Chemical Analysis

| SiO <sub>2</sub> | TiO <sub>2</sub> | Al <sub>2</sub> O <sub>3</sub> | Fe <sub>2</sub> O <sub>3</sub> | Na <sub>2</sub> O + K <sub>2</sub> O | P <sub>2</sub> O <sub>5</sub> | Other |  |
|------------------|------------------|--------------------------------|--------------------------------|--------------------------------------|-------------------------------|-------|--|
| 18.4-22.4        | 1.55-2.05        | 69.8-74.8                      | 0.75-1.25                      | 0.1-0.5                              | 3.75-4.25                     | 0-0.4 |  |
|                  |                  |                                |                                |                                      |                               |       |  |

### Typical Physical Properties

Tested in accordance with International and ASTM Standards

| Prefired to | Bulk Density          | Cold Crushing Strength | Cold Modulus of Rupture | Permanent Linear Change |
|-------------|-----------------------|------------------------|-------------------------|-------------------------|
| (°F)        | (lb/ft <sup>3</sup> ) | (psi)                  | (psi)                   | (%)                     |
| 230         | 160                   | -                      | 1130                    | -                       |
| 1000        | -                     | -                      | 1635                    | -0.2                    |
| 1500        | -                     | -                      | 2220                    | 0.2                     |
| 2000        | -                     | -                      | 2410                    | -0.2                    |
| 2500        | -                     | -                      | 2190                    | -0.2                    |
| 2900        | -                     | -                      | 2110                    | 1.9                     |

### Other Physical Properties

Tested in accordance with International and ASTM Standards

| Prefired to | Apparent Porosity | Thermal Conductivity          | Hot Modulus of Rupture | Permanent Volume Change |
|-------------|-------------------|-------------------------------|------------------------|-------------------------|
| (°F)        | (%)               | (Btu.in/h.ft <sup>2</sup> .F) | (psi)                  | (%)                     |
| 230         | -                 | 10.4                          | -                      | -                       |
| 1000        | -                 | 9.7                           | -                      | -                       |
| 1500        | -                 | 9.2                           | -                      | -                       |
| 2000        | -                 | 9.0                           | -                      | -                       |
| 2500        | -                 | 9.1                           | -                      | -                       |
| 2900        | -                 | 9.6                           | -                      | -                       |

Formerly: BLU-RAM® HS

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The physical and/or chemical properties and specifications of the product set forth above represent typical average results obtained in accordance with generally accepted standard test methods conducted under controlled conditions, and are subject to normal manufacturing variations. Vesuvius reserves the right to modify the properties and specifications at any time without prior notice.



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