

**BLACK JACK RAM 80**  
**SILICON CARBIDE PHOS BONDED PLASTIC**

PHYSICAL PROPERTIES

|  |                 |
|--|-----------------|
| Maximum Service Temperature                | 2700°F          |
| Lbs. Required per Cu. Ft.                  | 162 lbs./cu.ft. |
| Bulk Density After Drying at 230°F         | 157 lbs./cu.ft. |
| <u>Hot Modulus of Rupture</u>              |                 |
| HMOR at 1500°F                             | 2000 – 2400 psi |
| HMOR at 2550°F                             | 1000 – 1400 psi |
| <br>                                       |                 |
| <u>Cold Crushing Strength After 1500°F</u> | 2500 – 4000 psi |
| <br>                                       |                 |
| <u>Permanent Linear Change</u>             |                 |
| After Drying at 230°F                      | 0.0 to -0.8%    |
| After Heating to 1500°F                    | -0.0 to -0.2%   |
| After Heating to 2550°F                    | 0.0 to +0.8%    |

CHEMICAL ANALYSIS

|                       |                                   |       |
|-----------------------|-----------------------------------|-------|
| Silicon Carbide       | [SiC]                             | 77.6% |
| Silica                | [SiO <sub>2</sub> ]               | 5.5%  |
| Alumina               | [Al <sub>2</sub> O <sub>3</sub> ] | 10.8% |
| Iron Oxide            | [Fe <sub>2</sub> O <sub>3</sub> ] | 0.2%  |
| Phosphorous Pentoxide | [P <sub>2</sub> O <sub>5</sub> ]  | 4.3%  |
| Trace Minerals        |                                   | 1.6%  |

NOTE: All data subject to reasonable deviation and should not be used for specification purposes.

9040

