#### **PRODUCT**

## **BLACK JACK 30**

### LOW CEMENT SILICON CARBIDE CASTABLE

# REFRACTORIES TECHNICAL DATA

### PHYSICAL PROPERTIES

Maximum Service Temperature 2700°F

Lbs. Required Dry Mix per Cu. Ft. 155 lbs.

% Water by Weight Required for Casting (approx.) 6%

Bulk Density After Drying at 230°F 160 lbs./cu.ft.

Modulus of Rupture

After Drying at 230°F 1500 – 2000 psi Hot MOR at 1500°F 2800 – 3500 psi

Hot MOR at 2550°F 300 – 600 psi

Cold Crushing Strength

After 1500°F 8500 – 14000 psi

Permanent Linear Change

After Drying at 230°F

After Heating to 1500°F

-0.0 to -0.3

After Heating to 2550°F

-0.2 to -0.6

### **CHEMICAL ANALYSIS**

Silicon Carbide	[SiC]	29.9%
Silica	[SiO <sub>2</sub> ]	23.0%
Alumina	[Al <sub>2</sub> O <sub>3</sub> ]	43.9%
Iron Oxide	$[Fe_2O_3]$	0.6%
Lime	[CaO]	1.9%

### THERMAL CONDUCTIVITY BTU/SQ.FT./HR./°F/IN.

At 500°F	23.0
At 1000°F	21.4
At 1500°F	23.2

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

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