PRODUCT

BLACK JACK 50

LOW CEMENT, SELF FLOWING SILICON CARBIDE CASTABLE, PUMP MIX, SHOTCRETE

REFRACTORIES TECHNICAL DATA

PHYSICAL PROPERTIES

Maximum Service Temperature	2700°F
ASTM C-401	Class D
Lbs. Required Dry Mix per Cu. Ft.	152lbs.

% Water by Weight Required for Casting Approx. 6% Bulk Density After Drying at 230°F 155 lbs./cu.ft.

Modulus of Rupture

MOR After Drying at 230°F 1500 - 2000 psi MOR at 1500°F 2700 - 3300 psi MOR at 2250°F 500 - 700 psi

Permanent Linear Change

After Drying at 230°F Negligible

After Heating to 1500°F 0.0 to -0.2%

After Heating to 2550°F +0.3 to +0.7

Cold Crushing Strength

After Drying at 230°F 5000 - 7000 psi After Firing to 1500°F 8000 - 10000 psi

Abrasion Loss

After 1500°F 5 - 8 cc

CHEMICAL ANALYSIS

Silicon Carbide	[SiC]	51.5%
Silica	$[SiO_2]$	22.7%
Alumina	$[Al_20_3]$	23.6%
Iron Oxide	$[Fe_2O_3]$	0.3%
Lime	[CaO]	1.9%

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

At 500°F	33.3
At 1000°F	30.7
At 1500°F	32.7

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

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