

LOW CEMENT SPECIALTIES PRODUCT DATA

SPARCON 31P

SPARCON 31P is a high strength, low-cement bonded refractory designed for installation by vibration casting, pumpcasting or shotcreting. Data shown below is at pumpable consistency.

PHYSICAL PROPERTIES

Maximum Service Temperature		3100°F
Dry Castable Requirement		151 – 158 lbs./cu.ft.
Water requirement:	vibratable consistency 4.50 – 5.25%	pumpable consistency 5.25 – 6.00%
Erosion Resistance (ASTM C704)		Less than 10 cc loss. (Typical: 5 - 7 cc loss)
Modulus of Rupture		
After Heating to 1500°F		2300-2700 lbs/sq.in.
After Heating to 2300°F		2400-2800 lbs/sq.in.
After Heating to 2500°F		2400-2900 lbs/sq.in.
After Heating to 2910°F		2400-2900 lbs/sq.in.
Cold Crushing Strength		
After Heating to 1500°F		12000-16000 lbs/sq.in.
After Heating to 2300°F		12000-16000 lbs/sq.in.
After Heating to 2500°F		12000-16000 lbs/sq.in.
After Heating to 2910°F		12000-16000 lbs/sq.in.
Linear Change, %		
After Heating to 1500°F		0.0 to -0.4
After Heating to 2300°F		0.0 to -0.4
After Heating to 2500°F		0.0 to +0.4
After Heating to 2910°F		0.0 to -0.4
Hot Modulus of Rupture		
At 2000°F (typical average)		4290 lbs/sq.in.
Typical Chemical Analysis, %		
Al_2O_3		57.9
${ m SiO_2}$		37.9
CaO		1.4
TiO_2		1.6
Fe_2O_3		0.9
MgO		0.1
Alkalies		0.2

SPARCON 31P is available in 50[#] bags and bulk bags, palletized and shrink-wrapped.

NOTE: CASTABLES MUST BE STORED IN A DRY PLACE

Data shown are average results of standard ASTM tests unless otherwise noted. Results may vary subject to variations in manufacturing, testing, and installation procedures in the field.