

**PRODUCT:** POROSINT 500 SPL  
**TYPE:** LOW BD HIGH STRENGTH HOT FACE INSULATION BRICK  
**NATURE OF BOND:** CHEMICO – CERAMIC

### **GENERAL PROPERTIES**

Maximum Service Temperature: 1300 °C  
 Reversible Thermal Expansion: 0.55% at 1000°C

### **CHEMICAL ANALYSIS, %**

	<b>RANGE</b>	<b>TYPICAL VALUE</b>	<b>TEST PROCEDURE</b>
Al <sub>2</sub> O <sub>3</sub>	38.00 – 43.00	40.8	BIS 12107 Part 3
Fe <sub>2</sub> O <sub>3</sub>	1.03 – 1.15	1.10	BIS 12107 Part 6

### **PHYSICAL PROPERTIES**

	<b>RANGE</b>	<b>TYPICAL VALUE</b>	<b>TEST PROCEDURE</b>
Bulk density, g / cc	0.55 – 0.63	0.57	ASTM C 134
C old crushing strength, kg/cm <sup>2</sup>	10 – 18	13	ASTM C 133

### **THERMAL PROPERTIES**

	<b>RANGE</b>	<b>TYPICAL VALUE</b>	<b>TEST PROCEDURE</b>
Refractoriness, Orton / °C	-	20 / 1564	BIS 1528 Part 1
PLC, % after heating at 1230 °C / 24 hrs	+ 0.3 to - 0.8	- 0.5	ASTM C 210
Thermal Conductivity , Kcal/m/hr/°C at 800°C HF	0.18 – 0.25	0.22	Water Calorimetric Method

- Size Tolerance:
  - ± 1 mm on standard bricks.
  - ± 1% or ± 1.5 mm whichever greater for shaped bricks
- The data are current production averages. They can not be used as limit for specification