

|                        |                                                       |
|------------------------|-------------------------------------------------------|
| <b>PRODUCT:</b>        | <b>WHYTHEAT K (SUPREME)</b>                           |
| <b>PRODUCT CLASS:</b>  | <b>REFRACTORY MONOLITHIC</b>                          |
| <b>TYPE:</b>           | <b>ALUMINO – SILICATE CASTABLE (SUPERIOR STRNGTH)</b> |
| <b>NATURE OF BOND:</b> | <b>HYDRAULIC</b>                                      |
| <b>INSTALLATION:</b>   | <b>VIBRATION CASTING</b>                              |

### **GENERAL PROPERTIES**

|                             |               |
|-----------------------------|---------------|
| MAX. SERVICE TEMPERATURE:   | 1500 °C       |
| MAXIMUM GRAIN SIZE:         | 5 mm          |
| WATER REQUIRED FOR CASTING: | 10.5 – 11.7 % |

### **CHEMICAL ANALYSIS, %**

|                                | <b>RANGE</b> | <b>TYPICAL VALUE</b> | <b>TEST PROCEDURE</b> |
|--------------------------------|--------------|----------------------|-----------------------|
| Al <sub>2</sub> O <sub>3</sub> | 50 - 54      | 52                   | BIS 12107 Part 3      |
| CaO                            | 5.1 – 5.5    | 5.3                  | ASTM C 573            |
| Fe <sub>2</sub> O <sub>3</sub> | 1.30 – 1.70  | 1.50                 | BIS 12107 Part 6      |

### **PHYSICAL PROPERTIES**

|                                                            | <b>RANGE</b> | <b>TYPICAL VALUE</b> | <b>TEST PROCEDURE</b> |
|------------------------------------------------------------|--------------|----------------------|-----------------------|
| Dry density, g / cc<br>after drying at 110 °C / 24 hrs     | 2.25 – 2.35  | 2.28                 | BIS 10570             |
| CCS, kg/cm <sup>2</sup><br>after drying at 110 °C / 24 hrs | 500 – 600    | 550                  | BIS 10570             |
| after heating at 1100 °C / 3 hrs                           | 250 – 350    | 300                  | BIS 10570             |
| after heating at 1500 °C / 3 hrs                           | 500 – 600    | 570                  | BIS 10570             |
| % Retained on maximum size                                 | 0 – 5        | 1.0                  | BIS 1528 Part 14      |

### **THERMAL PROPERTIES**

|                                            | <b>RANGE</b>        | <b>TYPICAL VALUE</b> | <b>TEST PROCEDURE</b> |
|--------------------------------------------|---------------------|----------------------|-----------------------|
| Refractoriness, Orton / °C                 |                     | 30 / 1665            | BIS 1528 Part 1       |
| PLC, %<br>after heating at 1100 °C / 3 hrs | (- 0.40) to (+0.20) | -0.20                | BIS 10570             |
| after heating at 1500 °C / 3 hrs           | (- 1.00) to (-2.50) | -1.80                | BIS 10570             |

**Packaging: 50 kg bags**

**Delivery State: Dry**

**Storage Life:** Best till 9 months from the date of production, if stored in proper condition.

#### **Note:**

(1) The data are current production averages. They can not be used as limits for specification.