



## Technical Data Sheet Medium Purity Dense Castable

| Product Name                           |                                      |                 | Ultra Crete Normal           | Ultra Crete Special          | Ultra Crete Super            |
|----------------------------------------|--------------------------------------|-----------------|------------------------------|------------------------------|------------------------------|
| Type Of Bond                           |                                      |                 | Hydraulic                    | Hydraulic                    | Hydraulic                    |
| Max. Recommended Temp.                 |                                      |                 | 1400°C                       | 1400°C                       | 1450°C                       |
| Material Required (Kg/m³)              |                                      |                 | 2180                         | 2250                         | 2500                         |
| Maximum grain size (mm)                |                                      |                 | 6                            | 6                            | 6                            |
| Water required for installation (%)    |                                      |                 | 11-13                        | 11-13                        | 10.5-12.5                    |
| Installation method                    |                                      |                 | Casting                      | Casting                      | Casting                      |
| Chemical Properties                    | Al <sub>2</sub> O <sub>3</sub>       |                 | 42-46                        | 44-47                        | 68-72                        |
|                                        | (Fe <sub>2</sub> o3)                 |                 | 3.4- 4.2                     | 3.5-4.5                      | 4.8- 5.5                     |
| Physical Properties                    | Bulk Density at 110°C/24hrs (gm/cm³) |                 | 2.1- 2.25                    | 2.15- 2.35                   | 2.45- 2.65                   |
|                                        | Cold Crushing Strength (MPa)         | at 110°C/24hrs  | 25-35                        | 35-50                        | 35-45                        |
|                                        |                                      | at 1100°C/ 3hrs | 13-20                        | 20-30                        | 18-28                        |
|                                        |                                      | at 1350°C/ 3hrs | 23-33                        | 29-35                        | -                            |
|                                        |                                      | at 1450°C/ 3hrs | -                            | -                            | 35-47                        |
|                                        | Perm. Linear Change %                | at 1100°C/ 3hrs | 0.30 to -0.30                | -0.3 to 0.3                  | -0.3 to 0.3                  |
|                                        |                                      | at 1350°C/ 3hrs | 0.35 to 1.35                 | -0.3 to 1.15                 | -                            |
|                                        |                                      | at 1450°C/ 3hrs | -                            | -                            | -1.6 to 1.7                  |
| Packaging                              |                                      |                 | HDPE/ Paper Bags or Big bags | HDPE/ Paper Bags or Big bags | HDPE/ Paper Bags or Big bags |
| State Of Delivery                      |                                      |                 | Dry                          | Dry                          | Dry                          |
| Shelf Life (storage in dry conditions) |                                      |                 | 9 months                     | 9 months                     | 9 months                     |