U.S. ELECTROFUSED MINERALS, INC.

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# MUB - Fused Mullite

Fused Mullite ($Al_2O_3$ - $SiO_2$) for refractories

MUB is a fused mullite obtained from fusion of high purity sand and alumina in an electric arc furnace. It presents low thermal expansion and high thermal shock resistance that make MUB an excellent material for investment casting and other refractory applications,

## Typical Physical Properties

| Cristal Structure | Melting Point | Color | Specific Gravity | Average Cristal Size | Reversible Linear Expansion | Apparent Porosity | Apparent Specific Density |
|---|---|---|---|---|---|---|---|
| Orthorhombic | 1,850° C | White | 3.08 g/cc | 2,000 µm | 0.85% at 1,400° C | 2.8% | 3.00 g/cm³ |

* App. Porosity & App. Specific Density by ASTM C 20-00

## Chemical Analysis by XRF (%)

| $Al_2O_3$ | $SiO_2$ | $Fe_2O_3$ | $Na_2O$ | CaO |
|---|---|---|---|---|
| 73.57 | 25.88 | 0.05 | 0.41 | 0.04 |

## Grit Sizes

| Size (astm) | Size (mm) |
|---|---|
| 3/4" / 5/16" | 19.1 - 8.00 |
| 5/16" / 4 | 8.00 - 4.75 |
| 4 / 10 | 4.75 - 2.00 |
| 10 / 20 | 2.00 - 850 µm |
| 10 / 40 | 2.00 - 425 µm |
| 20 / 40 | 850 - 425 µm |
| 40 / 200 | 425 - 75 µm |
| TPF II | - 212 µm |
| 200 MF | - 75 µm |
| 325 MF | - 45 µm |

* Other grit sizes upon request.