



**White Fused Mullite**  
**Schmelzmullit**  
**Mullite Electrofondue**

A high quality White Fused Mullite specially developed for use in the production of cores and shells for steel and other metal casting.

Produced from electrofusion of Bayer process calcined alumina with selected low iron silica.

Major phases identified by X-Ray Diffraction as mullite with traces of glass and corundum. Mullite - the most stable phase of the aluminosilicate system, is found rarely in nature and is inevitably subject to contamination from other rock formations and contaminants. Synthetic mullite enables complete control of the chemistry and physical properties promoting complete control of the final ceramic system.

Individual crystallites are in the order of 50 mm in length and are formed, on cooling from the melt to

provide discrete crystals of mullite exhibiting:

- high thermal shock resistance
- low thermal expansion
- low glass content
- controlled surface properties
- excellent creep resistance

Cermatco is able to give complete specifications for an iron-free material down to ppm levels and for products with low leachable metal ion content to ensure stability of slurries in customers' binder systems

Standard sizes include:

5 - 3 mm	-0.5mm
3 - 1.0 mm	-0.15mm
1.0 - 0.00 mm	-0.08mm
0.5 - 0.25 mm	-45µ

### Chemical Analysis

Oxide	%
SiO <sub>2</sub>	23.5
TiO <sub>2</sub>	0.05
Al <sub>2</sub> O <sub>3</sub>	76.0
Fe <sub>2</sub> O <sub>3</sub>	0.05
CaO	0.05
MgO	0.03
K <sub>2</sub> O	0.10
Na <sub>2</sub> O	0.16

### Physical Properties

Bulk Density	3.02 g.cm <sup>-3</sup>
Apparent Porosity	3.0 %
Thermal expansion (reversible)	0.5%
Refractoriness	1850°C

### Specials

Complete formulations of Fused Mullite are available providing you with a cost-effective controlled mix.



**Cermatco Limited**  
An ISO 9001:2000 Company

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