



Advanced Ceramic Technologies

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## MV20 MULLITE

TYPE C610 TO IEC 60672

### Composition

Alumina	Al <sub>2</sub> O <sub>3</sub>	55.2%
Silica	SiO <sub>2</sub>	41.9%
Iron Oxide	Fe <sub>2</sub> O <sub>3</sub>	0.8%
Potassium Oxide	K <sub>2</sub> O	0.6%
Titania	TiO <sub>2</sub>	0.5%
Sodium Oxide	Na <sub>2</sub> O	0.4%
Calcia	CaO	0.3%
Magnesia	MgO	0.2%

### Physical Properties

Bulk Density	Open Porosity	Flexural Strength		Compressive Strength
		20°C	1000°C	20°C
2.5 g/cm <sup>3</sup>	0%	145 Mpa	96 Mpa	655 Mpa
156 lbs/ft <sup>3</sup>	0%	21 ksi	14 ksi	95 ksi

### Thermal Properties

Conductivity		Expansion Coefficient	Max Use Temperature (no load)
20°C	800°C		
2.4 W/m°K	2.0 W/m°K	5.4x 10 <sup>-6</sup> /C°	1450°C
17 BTU.in/ft <sup>2</sup> .hr°F	14 BTU.in/ft <sup>2</sup> .hr°F	3.0 x 10 <sup>-6</sup> /F°	2642°F

### Electrical Properties

Volume Resistivity	
20°C	600°C
>10 <sup>13</sup> Ω.cm	7.8x10 <sup>6</sup> Ω.cm

These values are typical but significant differences may occur depending on geometry, mass, specific processing methods used, and the surface finish of final components.