Alumina 96%

**CHEMICAL COMPOSITION**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al₂O₃</td>
<td>96%wt</td>
</tr>
<tr>
<td>MgO</td>
<td>0.95%wt</td>
</tr>
<tr>
<td>Na₂O</td>
<td>&lt;0.1%wt</td>
</tr>
<tr>
<td>SiO₂</td>
<td>3%wt</td>
</tr>
<tr>
<td>Fe₂O₃</td>
<td>0.05%wt</td>
</tr>
<tr>
<td>* by difference</td>
<td></td>
</tr>
</tbody>
</table>

**PHYSICAL PROPERTIES**

- Mean grain size: 4±1 μm
- Sintered density: 3.75 g/cm³
- Bending strength at 20°C: 300 MPa
- Hardness Hᵥ0.5: 1500 Hv

**THERMAL PROPERTIES**

- Thermal conductivity at 20°C: 20 W.m⁻¹.k⁻¹

**ELECTRICAL PROPERTIES**

- Dielectric constant at 25°C-1MHz: 8 (1MHz)
- tan δ: 5.10⁻³ (9GHz)
- DC Volume resistivity at 25°C: 1.10¹⁵ Ω.cm
- Dielectric strength at 3mm: 17 kV/mm⁻¹

**MICROSTRUCTURE**

**KEY FEATURES**

Cost-effective with good electrical, mechanical and wear properties

**TYPICAL APPLICATIONS**

Low purity alumina is usually well suited for applications such as rotor valves components pump seals, electrical insulators & inductors, wear nozzles, electrical connector housings, yarn guides in textile industry. For higher demanding performance product, alumina with higher purity will be a better choice.