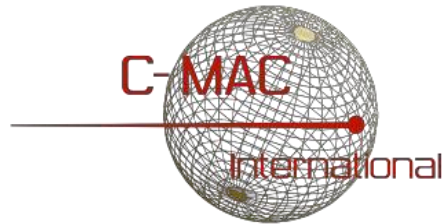




Technical Data of 99.5% Alumina

Al₂O₃	99.58%
Vickers Hardness	1600
Bending Strength (Mpa)	415
Thermal expansion (10⁻⁶/°C)	7.50
Density(g/cm³)	3.90
Isolation (kv/mm)	10
Ω .cm (300°C)	>10¹²
Cal/g. °C	0.28
Water absorption	0.001%
Modulus of elasticity (N/mm²)	10⁴-10⁵
Sintering Temperature	1650°



Technical Data of 95% Alumina

Al₂O₃	94.8%
SiO₂	1.92%
CaO	2.13%
Water absorption	0.003%
Density	3.65g/cm³
Vickers Hardness	1300
Ultimate tensile strength σ_{γ} - [N/mm²]	182
Ultimate bending strength σ_B - [N/mm²]	250~408
Ultimate compressive strength σ_C - [N/mm²]	1960
Modulus of elasticity E - [N/mm²]	10³-10⁵
Poisson's ratio ν - [mm/mm]	0.2-0.3
Thermal expansion coefficient α - [10⁻⁶/°C]	7.2
kV/mm	10
Ω .cm	
20°C	>10¹⁴
300°C	>10¹²
Te value, °C	930
ϵ (1MHZ)	8.6
tg δ X x 10⁻⁴ (MHZ)	3
$\epsilon \cdot \text{tg } \delta, \times 10^{-4}$	26