



AC5200

Thermally Reactive Alumina

General Characteristics

Chemical Formula	Al ₂ O ₃
Specific Gravity	3.9
Melting Temperature	2040° C
Refractive Index	1.76
Mohs' Hardness	9
Appearance	White Crystalline Powder

AluChem low soda Thermally Reactive Alumina is manufactured from selected Bayer Process feed. Soda is reduced prior to calcination utilizing a proprietary process which insures no addition of trace oxides. Our tightly controlled rotary calcining process delivers consistent critically important alumina crystal size and morphology. Size reduction of these crystal agglomerates to substantially fully ground powder of individual particles is achieved through dry milling in ceramic lined ball mills with high-alumina ceramic media. Throughout the process standards of green density, fired density and fired shrinkage are maintained.

Typical Chemical Composition

Properties	AC5200
Al ₂ O ₃ , %	99.8
SiO ₂ , %	0.05
Fe ₂ O ₃ , %	0.02
Na ₂ O, %	0.1 max
CaO, %	0.05
MgO, %	0.005
B ₂ O ₃ , %	0.000
Surface Area, m ² /g	1.4
Screen Analysis, % through 325 mesh	99-100
Median Particle Size by Microtrac, µm	2.5

Typical Ceramic Properties

*Green Density, gm/cm ³	2.4
*Fired Density, gm/cm ³	TBD
Fired Shrinkage	TBD

* Based on one inch diameter pellets pressed at 5000 psi.

