



ALUCHEM

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.

AC2800

Thermally Reactive Alumina

Typical Chemical Composition

| Properties | AC2800 |
|------------------------------------|---------|
| 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 |

Typical Physical Properties

| | |
|---------------------------------------|--------|
| Surface Area, m ² /g | 8 |
| Screen Analysis, % through 325 Mesh | 99-100 |
| Median Particle Size by Microtrac, μm | 0.5 |

Typical Ceramic Properties

| | |
|------------------------------------|-----|
| *Green Density, gm/cm ³ | 2.2 |
| *Fired Density, gm/cm ³ | 3.8 |
| Fired Shrinkage | 18 |

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

