



General Characteristics

Chemical Formula	Al ₂ O ₃
Specific Gravity	3.7 – 3.9
Melting Temperature	2040° C
Refractive Index	1.76
Mohs' Hardness	9
Appearance	White Crystalline Powder

Calcined Alumina (Unground)

Typical Chemical Composition

Properties	AC-1	AC-2	AC-12	AC13
Al ₂ O ₃ , %	98.8	99.5	99.6	99.2
SiO ₂ , %	0.02	0.02	0.02	0.02
Fe ₂ O ₃ , %	0.02	0.02	0.02	0.02
Na ₂ O, %	0.45	0.45	<.25	0.25
*L.O.I., % * 300-1200° C	0.75	0.14	0.14	0.3

Typical Physical Properties

Ultimate Crystal Size, μm	< 1	3	3	< 1
Surface Area, m ² /g	60-80	0.3 - 0.6	0.3 - 0.6	8 - 12
Specific Gravity	3.7	3.9	3.9	3.9
Bulk Density, Loose, lb/ft ³	62	60	62	60
Bulk Density, Packed, lb/ft ³	72	68	68	72

Typical Tyler Standard Sieve Analysis

% on 100 mesh	1 - 10	0 - 15	0 - 15	0 - 5
% on 200 mesh	65 - 85	60 - 80	60 - 80	40 - 80
% on 325 mesh	92 - 98	90 - 98	90 - 98	80 - 95
% pass 325 mesh	2 - 8	2 - 10	2 - 10	5 - 20

