



CERALOX[®]

SPRAY DRIED CERAMIC ALUMINAS

Typical CHEMICAL ANALYSIS

Alumina Powder	Al ₂ O ₃ Purity	Primary Impurities, ppm										
		Na	Si	Fe	Ca	Mg*	Ga	Cr	Ni	Ti	Zn	Zr
AHPA-RTP SB	>99.99%	15	20	15	5	300	<5	<2	<2	15	<2	<2
APA-RTP SB	99.94%	15	105	110	10	300	40	10	5	30	45	3

*Mg level obtained from the addition of high purity magnesium aluminate spinel

Typical PHYSICAL PROPERTIES

Physical Properties	AHPA-RTP SB	APA-RTP SB
Major Binder Component	Acrylic	Acrylic
Loss on Ignition: 105° C 550° C 1100° C	0.3 wt. % 3.0 wt. % 3.0 wt. %	0.3 wt. % 3.0 wt. % 3.0 wt. %
Primary Grain Size	0.3 micron	0.3 micron
Spray Dried Particle Size	55 micron	55 micron
Bulk Density	1.15g/cc	1.15g/cc
Green Density, 15,000 psi (103.4MPa)	2.35g/cc	2.35g/cc
Fired Density, 15,000 psi (103.4MPa)	3.95g/cc	3.95 g/cc
Ceramic Color	White	Light Pink

METHODOLOGY

Chemical Analysis:	Inductively Coupled Argon Plasma
Particle Size Distribution:	Laser Diffraction
Surface Area:	B.E.T.
Green/fired Density:	Alumina Ceramic Manufacturing ACMA Test 6 and ASTM C-373-72. Green density values are determined on a 10 gm pellet, pressed at 15000 psi (*103.4 MPa) in a 1" floating head die. Fired density values are determined from a pellet sintered at 1510°C for 2 hours.
Other Density:	Hosokawa Powder Analyser®