

3. High Purity Alumina (HPA)

Sumitomo High Purity Aluminas(HPA) are uniform fine powder characterized by fine powder form of highly pure and homogeneous crystal structure. They're manufactured by aluminium alkoxide hydrolysis process.

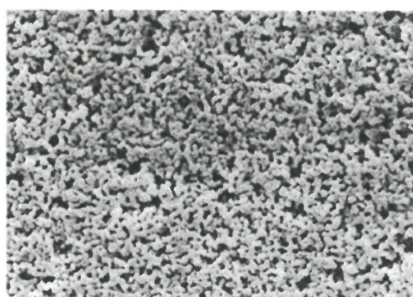
High Purity Alumina (HPA)

Product		AKX-5	AKP-20	AKP-30	AKP-50	AKP-53	AKP-3000
Typical Properties							
Crystal Structure		α	α	α	α	α	α
Purity(Al2O3)	[%]	≥ 99.99	≥ 99.99	≥ 99.99	≥ 99.99	≥ 99.99	≥ 99.99
Mean Particle Size (MT3300)	[μm]	-	0.46	0.27	0.20	0.18	0.70
Loose Bulk Density	[g/cm3]	2.2	0.9	0.9	0.9	1	0.41
Tapped Bulk Density	[g/cm3]	-	1.4	1.3	1.3	1.4	0.80
BET Surface Area	[m2/g]	0.3	4.3	6.7	10.3	11.7	4.5
Impurity	Si [ppm]	6	16	14	11	33	4
	Fe [ppm]	3	3	3	4	4	3
	Na [ppm]	2	4	2	2	2	2
	Mg [ppm]	1	3	3	2	5	1
	Cu [ppm]	1	1	1	1	1	1
Packing	PE Bag		20kg	20kg	20kg	20kg	10kg
	Paper Drum	100kg					
Application		Single Crystal	High-strength and high-density Ceramics, Composite Materials, Additives for non-Oxide Ceramics, Abrasives, Plasma Spray, Ceramic Filter, etc.				
			Insulation layer of Li-ion Secondary Battery				

Sumitomo Chemical Advanced Aluminas are α -alumina single crystals with precisely controlled particle size distribution and almost-spherical polyhedral shape.

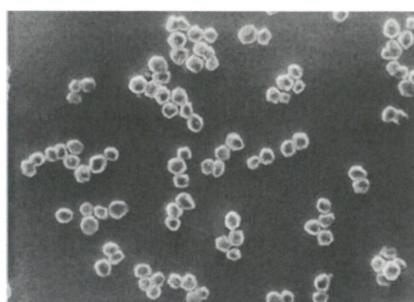
Advanced Alumina (AA)

Product		AA-03	AA-04	AA-05	AA-07	AA-1.5	AA-3	AA-18
Typical Properties								
Crystal Structure		α	α	α	α	α	α	α
Purity(Al_2O_3)	[%]	≥ 99.99	≥ 99.99	≥ 99.99	≥ 99.99	≥ 99.99	≥ 99.99	≥ 99.99
Mean Particle Size(MT3300)	[μm]	0.44	0.50	0.53	0.83	1.6	3.4	20.3
Loose Bulk Density	[g/cm ³]	0.5	0.5	0.6	0.6	0.6	0.7	2.0
Tapped Bulk Density	[g/cm ³]	0.9	1.0	1.1	1.2	1.3	1.5	2.4
BET Surface Area	[m ² /g]	5.2	4.1	3.2	2.2	1.1	0.5	0.1
Impurity	Si	[ppm]	5	4	3	3	4	18
	Fe	[ppm]	4	4	4	4	3	5
	Na	[ppm]	5	5	5	5	5	2
	Mg	[ppm]	1	1	1	1	1	1
	Cu	[ppm]	1	1	1	1	1	1
Packing	PE Bag	20kg	20kg	20kg	20kg	20kg	20kg	
	Pail Can							20kg
Application		High-strength and high-density Ceramics, Resin filler(thermal conductive materials), Plasma Spray, Catalyst, Ceramic Filter, etc.						



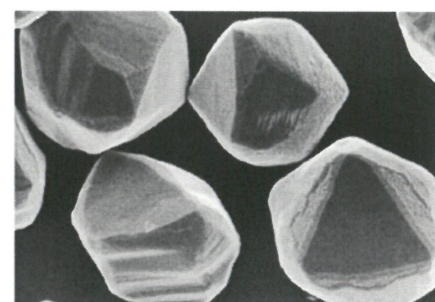
AA-04

5 μm



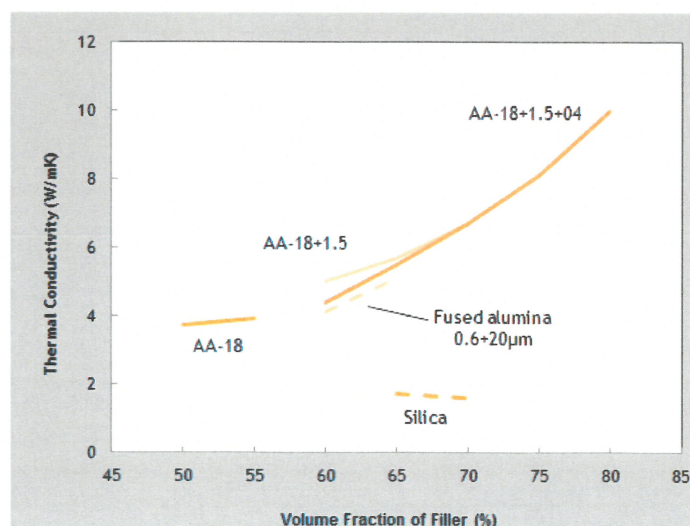
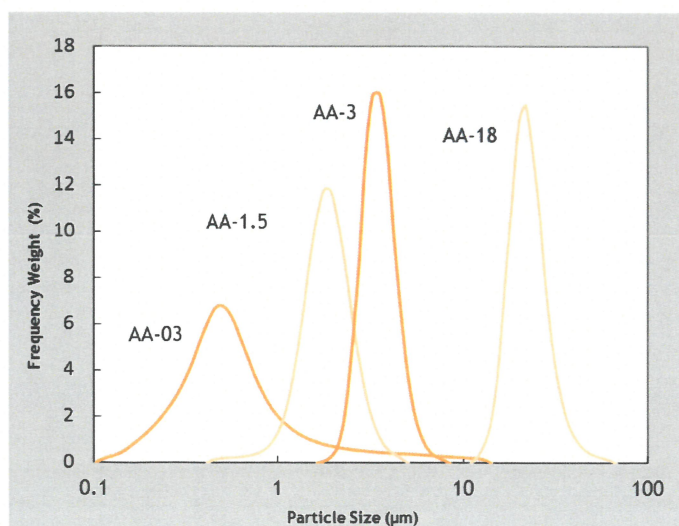
AA-1.5

10 μm



AA-18

20 μm



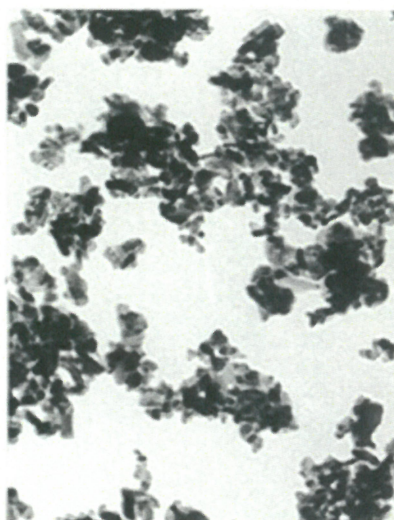
Gamma HPA

Product		AKP-G15	AKP-G07
Typical Properties			
Crystal Structure		γ	θ
Purity(Al_2O_3)	[%]	≥ 99.99	≥ 99.99
Loose Bulk Density	[g/cm ³]	0.14	-
Tapped Bulk Density	[g/cm ³]	0.19	0.3
BET Surface Area	[m ² /g]	164	72.9
Impurity	Si	[ppm]	2
	Fe	[ppm]	3
	Na	[ppm]	2
	Mg	[ppm]	1
	Cu	[ppm]	≤ 1
Humidity	[%]		0
Packing	Corrugated Paper Box	10Kg	20Kg



AKP-G15

0.1 μm



AKP-G07

0.1 μm