

# ProductData



## Alumina - Hydrated Grade (White)

C.A.S. Number: 21645-51-2

### Applications:

These aluminum trihydrate products have been produced in controlled particle size ranges for use in a variety of polymeric systems as flame-retardant and smoke suppressant fillers.

an extender and filler in polymeric systems for its fire retardant and smoke suppressant properties. It is used in a wide variety of systems including thermoplastics, thermosets and elastomeric polymers.

**Note:** Specific product application recommendations are available on request.

**Fillers** - Alumina trihydrate (ATH) is widely used as

BSI Code	3431	3339	3255	3111	4510	3100
<b>TYPICAL CHEMICAL ANALYSIS:</b>						
Al <sub>2</sub> O <sub>3</sub> - Aluminum Oxide (% min.)	65	65	65	65	65	65
SiO <sub>2</sub> - Silica (% max.)	0.008	0.008	0.008	0.02	0.008	0.008
Fe <sub>2</sub> O <sub>3</sub> - Ferric Oxide (% max.)	0.004	0.004	0.004	0.008	0.004	0.004
Na <sub>2</sub> O - Sodium Oxide (total %)	0.2	0.2	0.2	0.2	0.2	0.2
Na <sub>2</sub> O - Sodium Oxide (soluble %)	0.02	0.045	0.02	0.02	0.02	0.015
Loss on Ignition @ 550°C (%)	34.6	34.6	34.5	34.6	34.6	34.6
Moisture @ 105°C (%)	0.3	0.2	0.1	0.1	0.1	0.1
<b>TYPICAL PHYSICAL PROPERTIES:</b>						
Retained on 100 mesh (%)	0	0	<5	0	0	0 - 10
Retained on 200 mesh (%)	0.01	0	15 - 20	0	56	65
Retained on 325 mesh (%)	1	24	50	62	78	85
Passing thru 325 mesh (%)	99	75	60	38	22	10
Median Particle Size (micron)	8	16	30	57	70	90
Surface Area (m <sup>2</sup> /g)	2	1.3	1.5	0.6	0.32	0.75
Specific Gravity	2.42	2.42	2.42	2.42	2.42	2.42
Bulk Density - Loose (gm/c <sup>3</sup> )	0.78	0.85	1	1.6	1.16	1.2
Bulk Density - Packed (gm/c <sup>3</sup> )	1.35	1.35	1.5	1.6	1.5	1.5
Oil Absorption	28	23	18	10.5	-	15
TAPPI Brightness	98.5	95	98	56	-	97

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