



## POLYFILL, POLYJET INDUSTRIAL GRADES

*Alumina Trihydrate and Surface Modified Alumina Trihydrate Products.*

Alumina trihydrate is the leading flame retardant and smoke suppressant product used in a wide range of industrial applications.

### TYPICAL PHYSICAL PROPERTIES

Product Name	Polyfill 30	Polyfill 110	Polyfill 130	Polyfill 203	Polyfill 204	Polyfill 301	Polyfill 302	Polyfill 402	Polyfill 403	Polyfill 405	Polyfill 407	PolyJet 502
Median Particle Size (Microns)	60	16	19	13	15	10	12	3	4	5	7	2.2
Retained on 325 Mesh (%)	94	20	30	6.0	8.0	0.5	2.0	0.0	0.0	0.0	0.0	0.0
Retained on 200 Mesh (%)	70-83	3.9	9.4	0.4	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Retained on 100 Mesh (%)	5-15	0.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Specific Gravity	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42
Bulk Density (lb/ft <sup>3</sup> )	.70	.56	.60	.49	.51	.43	.45	.38	.40	.41	.42	.35
Bulk Factor (gal/lb)	.0495	.0495	.0495	.0495	.0495	.0495	.0495	.0495	.0495	.0495	.0495	.0495
Free Moisture	0.5	0.5	0.5	0.5	0.5	0.5	0.5	.80	.80	.80	.80	.80
Hunter "L" Brightness*	92	96	96	98	98	97	97	98	98	97	97	98
Oil Absorption	-	29	28	26	30	28	33	49	40	41	31	36

#### **POLYFILL SM PRODUCTS ARE ALSO AVAILABLE**

The SM series is an alumina trihydrate product surface modified for better performance. Polyfill's even distribution and free flowing properties permits higher loading levels without the generation of higher viscosities.

\*Performed on HunterLab UltraScan Pro unit

## TYPICAL CHEMICAL PROPERTIES

Product Name	Polyfill 30	Polyfill 110	Polyfill 130	Polyfill 203	Polyfill 204	Polyfill 301	Polyfill 302	Polyfill 402	Polyfill 403	Polyfill 405	Polyfill 407	PolyJet 502
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	64.900	64.900	64.900	64.900	64.900	64.900	64.900	64.900	64.900	64.900	64.900	64.900
Silica (SiO <sub>2</sub> )	00.010	00.010	00.010	00.010	00.010	00.010	00.010	00.010	00.010	00.010	00.010	00.010
Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> )	00.009	00.009	00.009	00.009	00.009	00.009	00.009	00.009	00.009	00.009	00.009	00.009
Soluble Soda (Na <sub>2</sub> O) Max.	00.050	00.050	00.050	00.050	00.050	00.050	00.050	00.050	00.050	00.050	00.050	00.050
Total Soda Max.	00.300	00.300	00.300	00.300	00.300	00.300	00.300	00.300	00.300	00.300	00.300	00.300
Loss on Ignition (H <sub>2</sub> O)	34.600	34.600	34.600	34.600	34.600	34.600	34.600	34.600	34.600	34.600	34.600	34.600
Industry/Market	4,7,10,11	1,2,3,13	1,2,12,13	7,10,12,13	7,10,12,13	1,2,10,12,13	1,2,10,12,13	7,9,10,12,13,14,15	7,9,10,12,13,14	7,9,10,12,13,14	7,9,10,12,13	2,7,9,10,12,13,14,15

### INDUSTRY/MARKET

1. ADHESIVES
2. CAULKS & SEALANTS
3. CARPET BACKING/LATEX COMPOUNDING
4. CAST POLYMERS/CAST EPOXIES
5. CERAMICS
6. CIPP REHABILITATION
7. ELASTOMERS
8. FLOORING
9. PAINTS & COATINGS
10. RUBBER
11. THERMOPLASTICS
12. THERMOSET PLASTICS (BMC/SMC, EXTRUSION, PULTRUSION, RTM, SPRAY-UP APPLICATION)
13. FIBERGLASS REINFORCED PLASTIC (FRP) APPLICATIONS
14. VINYL APPLICATIONS
15. WIRE AND CABLE