

POLYFILL, POLYJET MODIFIED SM 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 301SM	Polyfill 402SM	Polyfill 403SM	Polyfill 405SM	Polyfill 407SM	PolyJet 502SM					
Median Particle Size (Microns)	10	3	4	5	7	2.2					
Retained on 325 Mesh (%)	0.5	0.0	0.0	0.0	0.0	0.0					
Retained on 200 Mesh (%)	0.0	0.0	0.0	0.0	0.0	0.0					
Retained on 100 Mesh (%)	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					
Bulk Density (lb/ft³)	.43	.38	.40	.41	.42	.35					
Bulk Factor (gal/lb)	.0495	.0495	.0495	.0495	.0495	.0495					
Free Moisture	0.5	0.6	0.6	.80	.80	.80					
Hunter "L" Brightness*	97	98	98	97	97	98					
Oil Absorption	28	49	40	41	31	36					

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 301SM	Polyfill 402SM	Polyfill 403SM	Polyfill 405SM	Polyfill 407SM	PolyJet 502SM
Aluminum Oxide						
(Al ₂ O ₃)	64.900	64.900	64.900	64.900	64.900	64.900
Silica (SiO₂)	00.010	00.010	00.010	00.010	00.010	00.010
Ferric Oxide (Fe₂O₃)	00.009	00.009	00.009	00.009	00.009	00.009
Soluble Soda (Na₂O) Max.	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
Loss on Ignition (H₂O)	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

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



Because the conditions of use of this product are beyond seller's control the product is sold without warranty either express or implied and upon condition that the purchaser make its own tests to determine the suitability for purchaser's applications. Purchaser assumes all risk of use and handling of this product. This product will be replaced if defective in manufacture or packaging or if damaged, except for such replacement, seller is not liable for any damages caused by this product or its use. Any data and any statements and recommendations presented herein are believed to be accurate but no guarantee of their accuracy is made. Rev.3 (09/29/2020) WB