

MoldX[®] P18

Aluminum Hydroxide (ATH)

DESCRIPTION

MoldX P18 is a non-halogen, optimized ATH product designed for fiberglass reinforced polyester applications such as pultrusion, resin infusion and vacuum bag molding. MoldX P18 is engineered to have outstanding processing because the ATH particles flow easily throughout the fiberglass in the system.

An optimized particle size distribution with a small particle top size is a major advance for pultrusion. The pultruder can obtain a very low pull force at a high glass content (>60% by weight) with a MoldX P18-based formulation especially when compared to other standard ATH products. MoldX P18 also gives a low viscosity that allows formulators to use a higher loading of ATH. Increased loading gives increased flame retardant performance and possibly elimination or reduction in the amount of more expensive fire retardant additives. Technical service is available.

TYPICAL CHEMICAL ANALYSIS

Al(OH) ₃ , %	99.6
SiO ₂ , %	0.005
Fe ₂ O ₃ , %	0.007
Na ₂ O (total), %	0.3
Na ₂ O (soluble), %	0.04
Loss on ignition (1000 ^o C), %	34.6
Free Moisture (105 ^o C), %	0.25

TYPICAL PHYSICAL PROPERTIES

Screen Analysis

% on 325 mesh	0.01
% through 325 mesh	99.99
Median Particle Diameter, microns	5
Surface Area (m ² /gm)*	3
Specific Gravity (gm/cm ³)	2.42
Bulk Density - loose (gm/cm ³)	0.45
Bulk Density - packed (gm/cm ³)	0.8
TAPPI Brightness**	95

* As measured with a Quantachrome monosorb surface area analyzer (BET)

** TAPPI Brightness measured with a Hunterlab Colorimeter