

MoldX[®] P12

Aluminum Hydroxide (ATH)

DESCRIPTION

MoldX[®] P12 is a non-halogen, optimized ATH product designed for fiberglass reinforced polyester applications such as pultrusion, resin infusion and vacuum bag molding. These molding processes have increased capability when used with MoldX[®] P12. MoldX[®] P12 has a narrow particle size distribution that has a small particle top size. This allows all the ATH particles to flow readily throughout the fiberglass reinforcement.

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 high glass content (> 50% by weight) especially when compared to other standard ATH products. MoldX[®] P12 allows formulators to pass stringent certification tests such as ASTM E84 Class A without the use of halogenated flame retardants such as Deca-BDE. 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), %	0.2
Na ₂ O (soluble), %	0.025
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
% less than 12 microns	>99.0
Median Particle Diameter, microns	4.5
Surface Area (m ² /gm)*	4.2
Specific Gravity (gm/cm ³)	2.42
Bulk Density - loose (gm/cm ³)	0.45
Bulk Density - packed (gm/cm ³)	0.88
TAPPI Brightness**	95

* As measured with a Micromeritics Tristar surface area analyzer (BET)

**TAPPI Brightness measured with a Hunterlab Colorimeter