

# MoldX<sup>®</sup> A300

## Aluminum Hydroxide (ATH)

### DESCRIPTION

MoldX<sup>®</sup> A300 optimized alumina trihydrate (ATH) was designed specifically to provide dramatically improved processing viscosities to sheet molding compounds (SMC) at loadings ranging from 250 phr to greater than 350 phr. The unique characteristics of MoldX<sup>®</sup> A300 optimized ATH makes it our highest performing “low viscosity” grade. The high loading levels allow for the elimination of halogenated resins and additives typically used to pass conventional flame-retardant certification tests such as UL 94V-O, UL94 5VA, Dockett 90, or ASTM E84 Class A ratings. The elimination of halogens from SMC formulations result in greatly reduced smoke generation, allowing compounds to pass UL 723.

MoldX<sup>®</sup> A300 can also be used to achieve low-cost flame retardancy and smoke suppression in a variety of other color sensitive thermoset processes such as bulk molding compounds (BMC), spray-up, hand lay-up, and wet-mat molding.

### TYPICAL CHEMICAL ANALYSIS

Al(OH) <sub>3</sub> , %	99.6
SiO <sub>2</sub> , %	0.005
Fe <sub>2</sub> O <sub>3</sub> , %	0.007
Na <sub>2</sub> O (total), %	0.2
Na <sub>2</sub> O (soluble), %	0.025
Free Moisture (105°C), %	0.2

### TYPICAL PHYSICAL PROPERTIES

#### SCREEN ANALYSIS

Median Particle Diameter, microns	10
% less than 10 microns	52
% through 325 mesh	62
Loss on ignition (1000°C), %	34.6
Surface Area (m <sup>2</sup> /gm)*	1.8
Specific Gravity (gm/cm <sup>3</sup> )	2.42
Loose Bulk Density (gm/cm <sup>3</sup> )	0.86
TAPPI Brightness**	91

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

\*\* TAPPI Brightness measured with a Hunterlab Colorimeter