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# **HN-434**Alumina Trihydrate

### **DESCRIPTION**

HN-434 is a halogen–free, fine particle size ATH product that provides low cost flame retardant and smoke suppression in a variety of applications. The particle size distribution is specifically designed for low viscosity, high filler loading levels, and excellent processing characteristics, up to 200°C.

#### **APPLICATIONS**

A closely controlled top size with a large superfine fraction yields rapid dispersion in resin. Excellent mold flow and wet-out characteristics result in superior surface profile with minimal porosity, even pigmentation and excellent filler and reinforcement distribution throughout the molded part. HN-434 is recommended for spray-up or hand-lay up FRP applications, filament winding, panel production, resin injection, foam materials, cast polymer and epoxy parts, coatings, adhesives, latex, vinyl and urethane compounds.

PHYSICAL FORM:	White powder	MORPHOLOGY:	Hexagonal Platelets
<b>GENERIC TYPE:</b>	Alumina trihydrate	CAS No.:	21645-51-2

### TYPICAL CHEMICAL ANALYSIS

AI(OH) <sub>3</sub> , %	99.6
SiO <sub>2</sub> , %	< 0.04
Fe <sub>2</sub> O <sub>3</sub> , %	<0.02
Na <sub>2</sub> O (total), %	0.2
Na <sub>2</sub> O (soluble), %	0.03
Free Moisture (TGA), 105° C, %	0.35

## TYPICAL PHYSICAL PROPERTIES

Screen Analysis	
% < 45 micron	99
% < 10 micron	51.3
% < 1 micron	8.6
Median Particle Diameter, microns	9.5
Loss on ignition, 550° C, %	34.5
Surface Area BET (m²/gm	3
Specific Gravity (gm/cm <sup>3</sup> )	2.42
Bulk Density- packed (gm/lt.)	1100
Brightness Ry	94
CIELAB, L*	98
Moh's Hardness	3.0
Electrical Conductivity, µS/cm	<130
Oil Absorption, ml/100gm	22

#### **PACKAGING & STORAGE**

25 kg paper bag, 1000 kg pallet

The product should be stored under dry and clean conditions in its original packing. The moisture content may increase if not stored under dry conditions.

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