



Aluminium Hydrate (ATH)

A Superior Aluminium Hydrates from Hindalco Industries Limited, India

Chemical Name: Aluminium Hydrate (ATH)

Chemical Structure: $Al(OH)_3$

Make: Hindalco Industries Limited, India

Packing: 30 Kg Small PP bag

Technical Specification:

Parameters	Spec Range
$Al(OH)_3$ (%)	99.6 (Min)
LOI at 1000°C (%)	35.0 (Max)
Na ₂ O (%)	0.30 (Max)
Fe ₂ O ₃ (%)	0.02 (Max)
SiO ₂ (%)	0.02 (Max)
D50 (Sedigram 5125) (µm)	4.5 - 5.2
+ 45 µm	0.5 (Max)

Unique Features:

- Non-Halogenated:** Unlike bromine or chlorine-based FRs, ATH does not release toxic or corrosive gases during a fire, making it safer for public spaces and electronics.
- Smoke Suppression:** ATH is one of the most effective smoke suppressants available, reducing the density of smoke produced during polymer combustion.
- High Whiteness:** With high purity and low iron content (Fe₂O₃ max 0.02%), it maintains the color stability of the final polymer product.
- Cost-Effectiveness:** It serves as both a functional filler and a flame retardant, allowing for high loading levels (often 40%–60% by weight) to reduce overall material costs.

