

Aluminum (tri) hydroxide – hydrate ATH is obtained as a result of aluminum solutions decomposition in the course of Bayer process of alumina production.

Hydrate has a wide application:

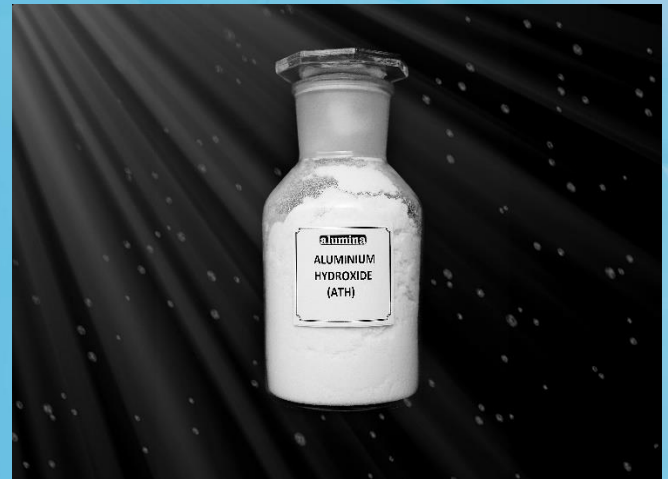
As raw material: Hydrated alumina is used in various productions such as:

- production of anhydrous alumina of different physical and chemical characteristics
- glass, glazes and frits
- catalyst production
- fertilizers and fibred cement board products
- as extender and bodying agent in paper
- solvent- and water-borne paint, UV curable
- coatings, inks and adhesives, etc.

Filler for flame retardant:

Hydrate is a non-smoking, flame retardant with low toxicity. Hydrated alumina loaded in plastic compounds when exposed to fire begins to decompose endothermic into water and anhydrous alumina. The water is cooling the plastic and significantly slowing its degradation into flammable fuel.

Depending on the customer's inquiry, ATH is produced in various coarseness ($d_{50} = 2 - 100 \mu\text{m}$), of specific surface and other properties that defines this product. Commercially available form of the product is white powder of defined granulation insoluble in water, soluble in hydrochloric sulfuric acid or sodium hydroxide.



Production of aluminum chemicals:

Hydrated alumina is used as one of the main components in different chemical products like aluminum sulfate, poly aluminum chloride (PAC), sodium aluminate, zeolites, aluminum fluoride etc.

Packaging: Depending on the buyer's request, the product is delivered in bulk or could be packed in jumbo bags and it is highly protected during transportation and storage.

Commercial name	Al ₂ O ₃ (%)	SiO ₂ (%)	Fe ₂ O ₃ (%)	Na ₂ O (%)	Moisture at 105 °C (%)	Ignition loss at 1000 °C (%)
Hydrate	Max 64.5	Max 0.006	Max 0.010	Max 0.18	Max 8	Max 35