

# Environment-friendly Halogen-Free Flame-Retardant ALUMINIUM TRI HYDRATE-110 (ATH-110)

ATH-110 is Precipitated Aluminum Hydroxide with Ultrafine Particle Size, High-Purity, High Whiteness and Small Specific Surface Area, widely used in **Low Smoke Halogen-Free Wire and Cable COMPOUNDS, Engineering-Plastics, Rubber, requiring flame retardant properties.**

## Characteristics:

High Purity with Minimum Ionic Impurities; Water Soluble Contents, hence recommended for use in Insulation Grade FRLS Compounds and XLPE also.

- High Water Release (35%) on Fire Condition to Reduce Smoke Generation & Increase Oxygen Index.
- Improved Flame Retardancy at Conventional Loading Level
- Achieve High Flame Retardancy Standard at Reduced loadings leads to
- **High Extrusion Rate**
- **Improved Mechanical Properties**

## Typical physical and chemical properties:

Item	Unit	ATH-110
Al(OH) <sub>3</sub>	%	≥99.4
SiO <sub>2</sub>	%	≤0.02
Fe <sub>2</sub> O <sub>3</sub>	%	≤0.02
Na <sub>2</sub> O	%	≤0.3
Na <sub>2</sub> O(Soluble)	%	≤0.03
Moisture	%	≤0.3
Loss on ignition(600°C)	%	34.5± 0.5
Whiteness	%	≥96
Particle size(D50) Laser diffraction	μm	1.7- 2.3
PH value	/	8-10
Oil absorption (linseed oil)	ml/1 00g	≤50
Electrical conductivity	us/c m	≤150
Specific Surface Area	m <sup>2</sup> /g	3-6
Density	g/cm 3	2.4
Refractive index	/	1.58