

## Pinfa's simplified pinFR substance factsheet

### Aluminum hydroxide (ATH) – Al(OH)<sub>3</sub>

CAS#21645-51-2; EC#244-492-7

#### Basic information on Human Health and Environmental Properties

Aluminum hydroxide is a non-hazardous, environmentally friendly, white powder.

It is not classified according CLP.

As an inorganic mineral ATH is not volatile, non flammable and non explosive.

ATH is not water soluble. Solubility slightly increases under acidic or caustic conditions. ATH as flame retardant is mainly used in plastic applications like wire&cables and EE.

Under normal ambient condition ATH is a stable product. Thermal decomposition starts at temperature >200°C. Decomposition products are water and non-hazardous aluminum oxide.

Due to its mineral origin ATH will not migrate nor evaporate out of plastic products. In a fire case ATH will decompose, absorbing energy, releasing water and causing charring (fire barrier). The released water vapour cools the surface of the polymer and particularly dilutes the concentration of burnable gases. It does substantially reduce smoke density and smoke corrosivity, too.

As a non-hazardous mineral aluminum hydroxide waste can be recycled, land filled or incinerated without any special requirements.

Link to ECHA Registered substance : [Aluminum hydroxide \(ATH\) – Al\(OH\)<sub>3</sub>](#)