

# ACTIVATED ALUMINA



## Product Description

With a surface area of over 200 m<sup>2</sup>/g, Activated Alumina is commonly used as a desiccant and a filter of fluoride, arsenic and selenium in drinking water. It is made of aluminium oxide (alumina; Al<sub>2</sub>O<sub>3</sub>) and has a very high surface-area-to-weight ratio due to its tunnel-like pores. This highly adsorbent activated alumina can release trapped water molecules when heated up to ~200 °C.

### Catalyst Applications

Activated Alumina can also be used to adsorb catalyst in polyethene production and in hydrogen peroxide production. This desiccant also acts as a selective adsorbent to remove chemicals such as arsenic, fluoride, and sulphur from gas streams (Claus Catalyst process).

### Fluoride Adsorbent

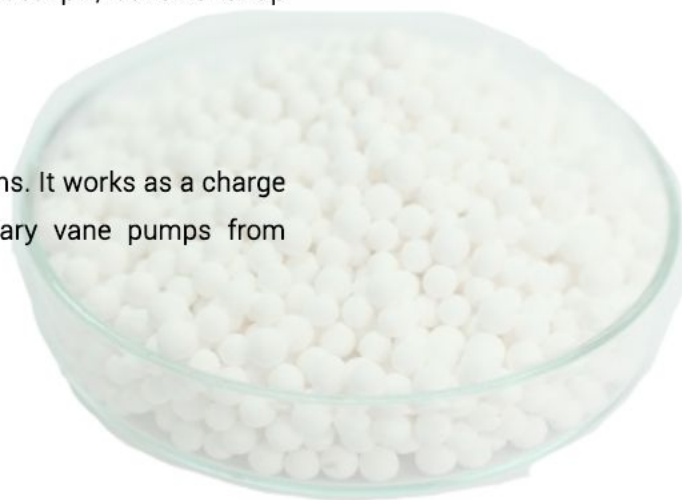
Activated Alumina is mainly used to remove fluoride from drinking water, easily reducing fluoride levels from 10.0 ppm (parts per million) to less than 1.0 ppm. The amount of fluoride removed from the water being filtered depends on how long the water actually touches the alumina filter media. With increased alumina, the amount of fluoride left in the filtered water decreases. Also, lowering the temperature and the pH of the water enables more effective filtering, with 5.5 being the ideal pH, it allows for up to a 95% removal rate.

### Vacuum Systems

Activated Alumina can also be used in high vacuum applications. It works as a charge material in fore-line traps to prevent oil generated by rotary vane pumps from backstreaming into the system

## Industries Served

- Electronics
- Healthcare
- Pharmaceuticals



## Key Features

- Physical appearance does not change
- Large surface adsorption area
- Ideal for use in heavy industrial applications



## Related Products



Silica Gel



Activated Clay



Activated Carbon



Molecular Sieve



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