



# ACTIVATED ALUMINA BALLS



## ADVANTAGES

- **Effective Fluoride Removal:** Activated alumina reduces fluoride concentration by chemically binding with fluoride, making it ideal for high-fluoride drinking water areas.
- **Arsenic Adsorption:** It effectively adsorbs arsenic (III) and arsenic (V) species from water.
- **Regenerable & Cost-Efficient:** Activated alumina can be regenerated multiple times using a simple sodium hydroxide desorption process, reducing costs.
- **Broad pH Compatibility:** Stable over a wide pH range, it suits various water treatment applications.
- **Low Dust Generation:** Minimizes dust, ensuring treated water remains clean.

## PHYSICAL PROPERTIES

- Appearance: White spherical balls
- Particle Size: 3 - 5 mm | 5 - 8 mm
- Bulk Density: 700 - 800 Kgs/M3
- Surface Area: 350 - 390 m<sup>2</sup>/g
- Pore Volume: 0.4 - 0.5 cm<sup>3</sup>/g
- Crushing Strength (min): 80 N
- Attrition Loss (max): 0.2 %
- pH (in a 5% slurry): 6 - 8

## ADSORPTION CAPACITY

- 1.4 g of fluoride for 100 g of media
- 15% RH: 6-8
- 60% RH: 23.6 %

## CHEMICAL ANALYSIS

- Al<sub>2</sub>O<sub>3</sub>: 93 % Min.
- Na<sub>2</sub>O: 0.65 %
- Fe<sub>2</sub>O<sub>3</sub>: 0.054 %
- SiO<sub>2</sub>: 1.23%
- Loss on Ignition (1000 C): 6 - 8

## CONDITIONS FOR OPERATIONS

- Bed depth (inches): 24 - 36
- Service flow (m/h): 5 - 15
- Backwash flow (m/h): 15 - 25
- pH Range: 4 - 10
- Temperature Range: Ambient to 500°C
- Operating Pressure: Atmospheric to 500 psi
- Activated alumina balls are suitable for both dry and liquid phase applications.
- Regeneration: Activated alumina can be regenerated by heating at 200-300°C.

## STORAGE AND MATERIAL HANDLING INSTRUCTIONS

- Store in a dry environment to prevent moisture absorption.
- Use appropriate personal protective equipment (PPE) when handling.
- Avoid dropping or subjecting the product to heavy impact.
- Do not ingest or inhale dust particles.

## ORDERING INFORMATION

Description	Packing	Wt. / Cu.Ft	Drums/Pallet	Weight / Pallet	Pallet Dimensions
Activated Alumina Balls	50 Kg Drum	21.5 Kgs	-	-	-

\* Weight Per Cubic Foot is Approximate.

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