

## Activated alumina Al<sub>2</sub>O<sub>3</sub>

- 2-5 mm -

Date: **01/2021**

SYMBOL: **SorbAA**

REVISION: **03**

### Product



### Product description

Activated alumina is an inorganic adsorbent with high porosity and strength. It is produced through the thermal treatment of alumina. Due to its unique properties, it is widely used in the industry for gas and liquid purification. Al<sub>2</sub>O<sub>3</sub> is a material with high mechanical strength and chemical resistance. Unlike many other white adsorbents, Al<sub>2</sub>O<sub>3</sub> is resistant to liquid water, allowing its use in situations where condensation of water vapor from the flowing gas may occur. It is a thermally stable material, and its specific internal structure enables the adsorption of fluoride compounds within the porous structure. SorbAA is characterized by high mechanical strength, making it suitable for use in temperature swing adsorption (TSA), pressure swing adsorption (PSA and VPSA), and mixed systems.

### Physico-chemical parameters

Activated alumina	
CAS	1344-28-1
EINECS	215-691-6
Form	beads
Bead size	2-5 mm
Chemical composition	Al <sub>2</sub> O <sub>3</sub> >93,0% <sub>w/w</sub> Na <sub>2</sub> O<0,35% <sub>w/w</sub>
Loss on ignition (300-1000°C)	5% <sub>w/w</sub>
Surface area BET	310-335 m <sup>2</sup> /g
Sock loading density	780-830 kg/m <sup>3</sup>
Particle crushing strength	19 daN
Attrition resistance (AIF method)	99,5% <sub>m/m</sub>
H <sub>2</sub> O adsorption capacity (25°C)	RH=10% : >7,5% RH=60% : >21,5%

[www.pochlaniaczewilgoci.pl/www.abcadsorpcji.pl](http://www.pochlaniaczewilgoci.pl/www.abcadsorpcji.pl)



## Product features / advantages

- thermally stable material,
- excellent mechanical and chemical strength,
- resistant to liquid water,
- high water adsorption capacity,
- removal of organic acids from oil allows the adsorption of fluoride and other trace impurities.

## Application

- in compressed air drying technology,
- drying of natural gas (LNG, LPG, NG),
- drying of process gases,
- protection of industrial tank vents,
- removal of residual organic acids from oils,
- transformer oils and lubricants,
- as a catalyst in chemical processes,
- adsorption of fluoride compounds.

## Product storage

Activated alumina should be stored in an airtight container in a dry room before use to avoid preliminary moisture adsorption from the environment.

## Product packaging

Activated alumina is delivered to customers in sealed containers that allow for easy opening and closing. Depending on the order size, the product is packaged in:

- 5 dm<sup>3</sup> plastic canisters,
- 60 dm<sup>3</sup> drums,
- 160 kg net drums (200 dm<sup>3</sup>),
- 1000 kg net big bags.

*All information presented in this document is based on our current knowledge and is believed to be accurate and reliable, however, it does not constitute a guarantee or liability on the part of ABC-Z System EKO s.c. All details regarding applicability do not relieve the buyer from the obligation to determine the suitability of the product for a particular application. The application, use and processing of the material cannot be controlled by the seller, therefore the user is solely responsible. It is the user's responsibility to comply with all applicable laws and to ensure a safe working environment*