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Kimya ve Maden Sanayi Tic. A.Ş.

To Protect Your Values…

PRODUCT DATA SHEET

ACTIVATED ALUMINA

Description and Uses

Used commercially in multi layered temperature swing absorbers (TSA) principally for carbon dioxide removal or oxygen separation from compressed air stream meant for cryogenic air separation process.

High surface area and tailored pore distribution of Activated Alumina provide a high dynamic H_2O adsorption capacity. With proper tower design and effective regeneration, Activated Alumina can achieve an ultra-low H_2O effluent specification (i.e. dew point). Activated Alumina also has excellent cyclic stability that yields a long life.

Product Advantages

- It is effective in high humidity.
- Less energy is required for regeneration.
- Also used in unheated air dryers.
- High chemical purity.
- It is resistant to fragmentation and crumbling.

Usage Areas

- In hospital drying systems
- Air drying systems in food factories
- Removing acidic products caused by the degradation of oils
- Taking moisture and other impurities from various gases and liquids

Physical and Chemical Specifications

Chemical Formula	$Al_2O_3.nH_2O$
Appearance	White
Grain Shape	Spherical
Particle Size (mm)	1-3, 3-5, 5-7
Bulk Density (g/L)	650-750
Surface Area (m^2/g)	≥300
Pore Volume (cm^3/g)	0.38-0.49
Crushing Strength (N/grain)	≥130
Al_2O_3 (%)	≥92
Na_2O_3 (%)	≤0.50
Fe_2O_3 (%)	≤0.03
SiO_2 (%)	≥0.10

Performance Properties

Water vapor adsorption capacity at 25°C

40% Relative Humidity	min. 10%
80% Relative Humidity	min. 20%

Packing

Active Alumina product; it is shipped in 125-150 kg barrels or 25 kg hermetic packages.

Transport and Handling

Activated Alumina should be kept always in airtight medium in order to avoid and prevent water vapor adsorption of the product.

General Notes:

The information in these publications reflects our own average findings and comments for our products however the use of the product may vary according to the field of application and the buyer is solely responsible for the application, use and reprocessing of the material.

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