

Activated Alumina

GMGB manufactures activated alumina beads in two sizes : 2-5mm dia, and 5-8mm dia by the State of the Art technology. The products have at least equal to and, in some cases, better properties than what have been specified in the Bureau of Indian Standards: BIS 9700 (Revised 1991). Specifically it has very high water adsorption capacity, and mechanical strength, and at the same time very low attrition loss. Its main application is in air drying; however, it may be used favorably for purification of drinking water (fluoride removal), and removal of acidic vapours from gases. The robust nature of the product makes it suitable for application in high pressure. GMGB Activated Alumina is designed to give a dew point of at least 40° C in most conditions. However, in case of rigorous adsorptive drying under high pressure, in case of rigorous adsorptive drying under high pressure, the moisture content in the exit gas or air may go down to less than 1 ppm (i.e. a dew point of - 40° C and better.)

Specifications

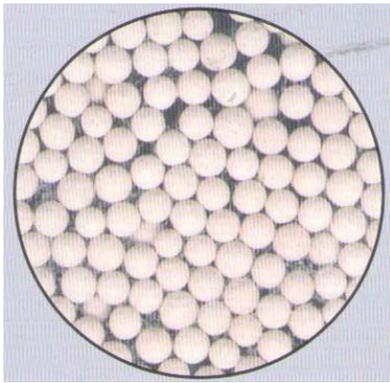
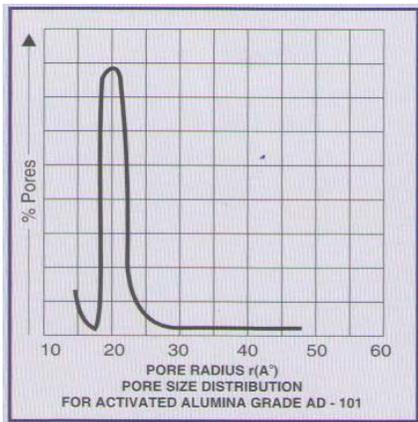
GMGB AD-202

Product	Activated Alumina		
Grade	AD 202		
Particle Shape/ size	2-5 mm dia Spherical Beads.		
	PHYSICO-CHEMICAL PROPERTIES	UNIT	GMGB AD 202
	Equilibrium Water Adsorption Capacity at 30 and 60 % RH	% w/w	16 % min
	Surface Area (BET Method)	M ² /g	300 ± 50
	Loss On Ignition (250 – 1000 deg. C)	% w/w	7.0 max
	Attrition Loss on Tumbling	% w/w	0 – 0.4
	Free Moisture (Max)	% w/w	1.5
	Bulk Density	g/L	775 - 875
	Bed Crushing Strength	%	90 min

Note :-

- Surface Area by benzene adsorption method. The values are lower when measured by BET nitrogen method (250-325 gm). Owing to carcinogenic threat to environment, safe method of nitrogen adsorption is adopted.
- For spheres of more than 5 mm diameter the specific surface and water adsorption capacity values are approximately 10% lower than the above figures.





Packing :

Activated Alumina is packed for industrial use in airtight MS drums under hot conditions with proper sealing arrangement so that there is no ingress of moisture during storage and transport. Standard packing : 210 Lit. drum size 565 x 850 (H) mm.

Life :

Activated Alumina has infinite shelf life, when stores in packed condition. The active service life would depend, however, on the operating conditions of the plant, actual application, and the usage by the customer.

Loading :

Activated Alumina does not require any special precaution or procedure during loading. However, the health of the grid support is to be checked, and the vessel is to be cleaned of dust, foreign particles, etc. Before the adsorbent is loaded. During actual loading, the materials should be poured carefully through funnel and chute so as to avoid dusting and attrition due to impact of free fall. The drums should be kept in the covered shed. In case of prolonged exposure of the adsorbent to moisture during storage / loading, it may require prolonged regeneration at higher temperature to restore its full adsorptive capacity.

Material Safety Data :

The product as such is neither inflammable, nor toxic. Overall, it is not hazardous. Repeated exposure may irritate skin, eyes and respiratory system. The product gets hot as its is first exposed to atmosphere due to adsorption of moisture.

Regeneration :

Activated Alumina should be regenerated before first use. The regeneration temperatures range from 110° to 150° C. The higher the regeneration temperature, the longer the operating cycle time and the lower the exit dew point of the gas. Where high efficiency is needed (dew point better than 50° C), a regeneration temperature of at least 150° C is required. If the regeneration gas is wet, a higher regeneration temperature of 200°-250° C is required. For a better performance over prolonged period, GMGB's Activated Alumina should not be exposed to temperatures above 350° C repeatedly.

Applications :

1. Air Drying for Dew Point of less than (minus) 40° C
2. Drying of Feed Air N₂-O₂ Cryogenic Plant.

Gujarat Multi Gas Base Chemicals Pvt. Ltd.



Opp. ONGC Nagar, Palavasna,
Mehsana-384003. (North Gujarat), INDIA
Tel. No. : +91 2762-225566, 225577
Fax No. : +91 2762-225544
E-mail : gujaratmulti@gmail.com
manekmin@sancharnet.in



Marketing Office :-

Mumbai

C-11, 3rd Floor, Krishna C.S.H. Ltd., Subhash Road,
Near Garware House Vile Parle (East) Mumbai-400 057
Ph. : +91-22-26835130, 32979944, Fax No. : +91-22-26835874
E-mail : molsieve@gmgb.net, silica@gmgb.net

AHMEDABAD

8-B, Navdeep Apartments, B/h C.U. Shah Collage,
Navjivan Press Road, Ashram Road, Ahmedabad-14,
Tel. No. : +91-79-27544318, Fax : +91-79-27544314.

Website : www.gmgb.in

BRANCHES : KOLKATA, DELHI, CHENNAI, INDORE, HYDERABAD & SINGAPORE.