

# Standard Activated Alumina



www.moleculartek.com  
moleculartek@gmail.com

## Description

Activated alumina is used to adsorb gases and liquids and is frequently used as a filter to remove contaminants from various feed streams, such as fluorine from drinking water. Activated Alumina is useful for bulk moisture removal and suitable for removing humidity from air. Activated alumina can also be used as a catalyst.

## Specifications

Activated Alumina		Bead				
Property	Unit	1/4 Inch	3/16 Inch	1/8 Inch	1/16 Inch	7x14 Mesh
Particle Size	mm	5.0 - 7.0	4.0 - 6.0	2.36 - 4.0	-	-
Attrition	wt%	≤0.4	≤0.4	≤0.4	-	-
Bulk Density	lb/ft <sup>3</sup>	45.6 ±2	45.0 ±2	46.2 ±2	49.8 ±2	49.8 ±2
Crush Strength	lbf	45.0	≥36.0	≥30	≥4.5	≥4.5
Static Water Adsorption Capacity	wt%	≥17.0	≥17.0	RH75%: ≥22.0 RH60%: ≥17.0	≥15.0	≥15.0
Loss On Ignition 570°F - 1,835°F	wt%	≤8.0	≤8.0	≤8.0	≤8.0	≤8.0
Loss on Ignition 32°F - 570°F	wt%	≤2.0	≤2.0	≤2.0	≤4.0	≤4.0
Pore Volume	cc/g	≥0.40	≥0.40	≥0.40	≥0.30	≥0.30
Surface Area	m <sup>2</sup> /g	≥300	≥300	≥300	≥285	≥285

## Industries Used

natural gas dehydration  
biofuel production  
dehydration of unsaturated hydrocarbons streams (cracked gas, acetylene, ethylene, propylene, butadiene)  
adsorption of NH<sub>3</sub> and H<sub>2</sub>O from N<sub>2</sub>/H<sub>2</sub> streams  
polar liquid drying (ethanol and methanol)  
plastic, paint, sealant, glue

petroleum gas dehydration  
oil refining

refrigerant drying  
insulated glass

## Storage

Activated alumina is an adsorbent and should not be left exposed to open air to prevent water from being adsorbed before its intended use. This product should be stored in dry conditions with air-proof packaging.