



## • NAIKE- 13X XP

### Description

XP molecular sieve is a new type of molecular sieve in the air separation unit, which is a kind of alkali metal silicon aluminate. Compared with ordinary 13X molecular sieve, its adsorption performance is improved by about 50%, and the adsorption effect of N<sub>2</sub>O is also more obvious at low partial pressure. XP molecular sieve can adsorb the critical diameter of not more than 10A molecules.

### Chemical Formula


$Nax[(AlO_2)_x(SiO_2)_y].zH_2O$

### Regeneration

XP molecular sieve can be purged or vacuumed for regeneration and reuse at elevated temperature. The degree of regeneration (dehydration) depends on the humidity and temperature of the purged air.

### Packing

XP molecular sieve has 8×12 orders, 4 × 8 orders spherical and other forms..Load and ship in sealed steel drums.

Capacity Of The Drum	Net Weight (KG)	
22gallons (0.083/Cubic meters)	50	
55gallons (0.208/Cubic meters)	135	

### Technical Specification

Items	Quality Indicators	
	4 × 8 mesh	8 × 12 mesh
Type Of The Product	4 × 8 mesh	8 × 12 mesh
Nominal Diameter, (A)	10	10
Packing Density , (kg/m <sup>3</sup> )	640	640
Grain Diameter , (mm)	3.6-4.5	1.6-2.2
Crushing Resistance, N/ piece	≥65	≥25
Wear Rate, %	≤0.20	≤0.20
Static Water Adsorption *, %	≥30	≥30
Static Carbon Dioxide Adsorption**, %	≥21	≥21
Static Carbon Dioxide Adsorption***, %	≥6.5	≥6.5
Water Content Of Package (at time of shipment), %	≤1.0%	≤1.0%
adsorb molecular	Molecules with effective diameter < 10A	≥6.5
discharge molecular	The effective diameter of the discharge molecule is >10a, such as N <sub>2</sub> O	≤1.0%

### Remarks:

\* The number of grams of water adsorbed per 100 g of activated adsorbent at a pressure of 17.5 mm hg and a temperature of 250C. \*\* The number of grams of carbon dioxide adsorbed per 100 grams of activated adsorbent at 250 mm Hg and 250C. \*\*\*Grams of carbon dioxide adsorbed per 100 grams of activated adsorbent at 2.5 mm hg pressure and 250C temperature.

### Application

XP molecular sieves are used for purifying raw materials with high impurity content in air separation units (removing H<sub>2</sub>O, CO<sub>2</sub> and N<sub>2</sub>O at the same time), as well as some hydrocarbons. It can also be used in pressure swing adsorption oxygen making device to greatly improve oxygen production. Any molecule that can be adsorbed on 3A, 4A and 5A molecular sieves can be adsorbed on XP type. In addition, XP type can adsorb molecules with larger critical diameters, such as some aromatic hydrocarbons and branched

