



Zhengzhou SnowMountain Industrial Co., Ltd

郑州雪山实业股份有限公司

5A Molecular Sieve

Introduction

5A molecular sieve is commonly known as CA molecular sieve, can adsorb any molecule with diameter less than 5 angstroms. Mainly used in n-isomeric hydrocarbon separation, PSA separation, and co-adsorption of water and carbon dioxide. With high selective adsorption and fast adsorption speed, SNOWPEAK 5A molecular sieve is especially suitable for pressure swing adsorption(PSA) industry, which can adapt to any size of oxygen, hydrogen, carbon dioxide and other gas production PSA devices.

Technical Specification

Type	5A			
Nominal Pore Diameter	5 angstroms			
Chemical Formula	$0.7\text{CaO} \cdot 0.3\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2 \cdot 4.5\text{H}_2\text{O}$ ($\text{SiO}_2 : \text{Al}_2\text{O}_3 \approx 2$)			
Shape	Bead		Pellet	
Diameter(mm)	1.6-2.5	3.6-4.8	1/16"	1/8" (PK 20)
Bulk Density(g/ml)	≥ 0.68	≥ 0.72	≥ 0.64	≥ 0.64
Crush Strength(N)	≥ 30	≥ 90	≥ 35	≥ 80
Wear Ratio(%)	≤ 0.2	≤ 0.2	≤ 0.2	≤ 0.25
Water Content(%)	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5
Static H ₂ O Adsorption(%)	≥ 21	≥ 21	≥ 21	≥ 21



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Application

Natural gas drying, desulphurization, carbon dioxide removal;
Nitrogen and oxygen separation, nitrogen and hydrogen separation;
Petroleum dewaxing

Packing

Iron drum, net weight 125/135/140kg; or according to customer requirements

Storage

Room temperature; relative humidity no more than 90%; no exposure to air; avoid water, acid, alkali

Regeneration

Water removal: Depends on the pressure, temperature and water content of the regeneration gas. Generally, 200~350°C dry gas under 0.3~0.5kg/cm pressure, passes into the molecular sieve bed for 3~4 hours, the outlet temperature reaches to 110~180°C, cooling.

Organic removal: Replace the organics with water vapor, and then remove the water.