



Zhengzhou SnowMountain Industrial Co., Ltd

郑州雪山实业股份有限公司

PSA Molecular Sieve

Introduction

Pressure swing adsorption(PSA) molecular sieve is a synthetic silicon aluminate crystal with different silicon-alumina ratios to form different types of molecular sieve, and after the exchange of different metal cations into the same type of different categories of molecular sieve.

SNOWPEAK PSA molecular sieve has high oxygen and nitrogen separation performance and sufficient oxygen production rate. Due to its special production technology, the molecular sieve has excellent adsorption and desorption properties. It is mainly used for large, medium and small PSA oxygen generating units to implement oxygen and nitrogen separation, making industrial and medical oxygen enrichment.

Technical Specification

Type	5A	13X-HP
Nominal Pore Diameter	5 angstroms	10 angstroms
Diameter(mm)	0.5-1.0	1.6-2.5
Bulk Density(g/ml)	≥0.69	≥0.69
Crush Strength(N)		≥25
Wear Ratio(%)	≤0.3	≤0.3
Water Content(%)	≤1.5	≤1.5
Static H ₂ O Adsorption(%)	≥21	≥30
Oxygen Content(%)	93±3	93±3
Oxygen Production Rate(Nl/kg.h)	≥40	≥20

Application

Adsorption and separation of hydrogen, oxygen, nitrogen, methane, carbon monoxide, carbon dioxide, sulfide and other gases and liquids;

Packing

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



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Storage

Room temperature; indoor humidity no more than 90%; avoid water, acid, alkali; isolate air; sealed pre:

Regeneration

SNOWPEAK PSA molecular sieve can be purged and regenerated by increasing the temperature, regeneration (dehydration) degree depends on the humidity and temperature of the purging gas.

Water removal: Heat dry gas such as nitrogen, air, hydrogen, saturated hydrogen carbide to 150-320 °C, then pass it into the molecular sieve bed under the pressure of 0.3-0.5kg/m² for 3-4 hours, and then pass the dry cold gas into the adsorber for 2-3 hours, isolate the air and cool it to room temperature.

Organic removal: Replace the adsorbent from the molecular sieve by water vapor, and then heat. Or pass into hot vapor or inert gas at the in 200-350°C, not use gases that produce explosive mixtures by contact with the adsorbent.

Gas removal: reduce the pressure