

3A Molecular Sieve



3A molecular sieve is an alkali metal aluminosilicate with a pore diameter of 3A. It is mainly used to adsorb water and does not adsorb any molecule with a diameter larger than 3A. According to the industrial application characteristics, the molecular sieve has the advantages of fast adsorption, High strength and other capabilities, improve the utilization efficiency of molecular sieve and extend the service life of molecular sieve, which is the desiccant necessary for the deep drying, refining and polymerization of gas and liquid in petroleum and chemical industry.

3A molecular sieve in the water adsorption process, excluding other hydrocarbon molecules, widely used in petroleum pyrolysis gas, such as ethylene, propylene, butadiene, acetylene and natural gas deep drying. Can also be used for polar liquids (such as ethanol), liquefied petroleum gas, solvent drying. The 3A molecular sieve produced by our company has succeeded in replacing the imported products in petrochemical enterprises. For example, it can be used as desiccant for pyrolysis gas. After adsorbed by 3A molecular sieve, the gas water content can be reduced below 1ppm (dew point less than -70°C).

3A molecular sieve hot dry gas (usually nitrogen) for regeneration, reuse. The degree of regeneration depends on the temperature, flow rate and humidity of the hot drying gas (regeneration optimum temperature $200-350^{\circ}\text{C}$).

3A / 4A / 5A Molecular Sieve Specification:

Property	Unit	Bead		Note
		1.6-2.5	3-5	
Diameter	mm	1.6-2.5	3-5	
Static H ₂ O Adsorption	%wt	≥26.00	≥26.00	RH50%, 25 °C
Static CO ₂ Adsorption	%wt	≥ 18.00	≥ 18.00	250mmHg, 25 °C
Bulk Density	g/ml	≥ 0.62	≥ 0.62	Tapped
Loss on ignition	%wt	≤1.50	≤1.50	575 °C , 1hr
Loss on Wear	%wt	≤0.10	≤0.10	~
Crush strength	N	≥30	≥80	A vg. 25 beads
Particle ratio	%	≥97	≥99	~

