

## Molecular Sieve 5A

**Molecular Sieve 5A** is an alkali aluminosilicate; it is the calcium form of the Type A crystal structure. Type 5A has an effective pore opening of 5 angstroms (0.5 nm). It will adsorb molecules with a kinetic diameter of less than 5 Angstrom and exclude molecules larger than 0.5nm. It is especially suitable for PSA adsorber applications where it may be used for the separation of normal- and iso-paraffins (C4 to C6 species), in PSA hydrogen purification and in oxygen concentrators.

Property	Unit	Bead		Pellet		Note
Diameter	mm	1.6-2.5	3.0-5.0	1/16"	1/8"	
Static Water Adsorption	%wt	≥22.00	≥22.00	≥21.00	≥21.00	RH50%, 25°C, Activated
Bulk Density	g/ml	≥0.70	≥0.68	≥0.64	≥0.64	Tapped
Water Content	%wt	≤1.50	≤1.50	≤1.50	≤1.50	550°C, 1hr
Loss on Attrition	%wt	≤0.10	≤0.10	≤0.20	≤0.30	~
Crush Strength	N	≥30	≥80	≥30	≥80	Avg. 25 beads
Particle Ratio	%	≥98	≥98	≥98	≥94	~

### Recommended Application:

1. The strong ionic forces of the divalent calcium ion makes it an excellent adsorbent to remove water, CO<sub>2</sub>, H<sub>2</sub>S from sour natural gas streams, while decreasing COS formation. It can also adsorbs light mercaptans.
2. It is also used for the separation of normal- and iso-paraffins.
3. Production of high purity N<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub> and inert gases from mixed gas streams.

### Packing:

- 55 gallon air-tight iron drum,
  - Super Sack
- ※Other packing according to your requirement.