

TECHNICAL DATA SHEET (TDS)

MOLECULAR SIEVE TYPE 5A



5A Molecular Sieve is a calcium form of aluminosilicate. The Molecular Sieve will adsorb molecules which have a critical diameter less than five angstroms (CH₃OH, C₂H₅OH & Propane).

Molecular Sieve 5A is cation exchanged calcium form of A type crystal structure. The calcium ion exchange in "A" crystal effectively increases the Molecular Sieve pore size to 5 angstroms, and it enables selective adsorption depending upon molecular size of adsorbate.

Molecular Sieve 5A adsorbs n-paraffin irrespective of chain length and not the branched chain hydrocarbon. Hence it is used for specific applications like, separation of normal from branched chain paraffin. Our Molecular Sieve being spherical in shape produces uniform packing and adsorbate diffusion in the adsorber, also exhibits high resistance to attrition and physical damage during service.

GENERAL CHARACTERISTICS

Parameter	5A-S		5A-G		5A PP
	Pellets	Beads	Pellets	Beads	Powder
Shape					
Size (mm)	3.0 & 1.5	0.5 - 6.0	3.0 & 1.5	0.5 - 6.0	2-10 micron
Bulk Density Kg/ lit	0.75 - 0.85	0.75- 0.85	0.64 -0.70	0.64 -0.70	0.5-0.55
Water Adsorption Capacity 4.6 mm of Hg (%) 15% RH(%)	21.5	21.5	19.0	19.0	22.0
Water Adsorption capacity 30°C & 23.5 mm of Hg (75%RH) (%)	23.5	23.5	21.0	21.0	24.0
Attrition/ Abrasion Resistance (%)	< 0.15	< 0.15	< 0.2	< 0.2	----

TYPICAL APPLICATIONS

- Hydrocarbon Separation (straight chain n-paraffins from iso-paraffins and cyclic compound -both in gas & liquid phase)
- Inert Gas Drying and Purification (removal of CO₂ with simultaneous drying)
- Recycle Gas Sweetening (removal of H₂S)
- Pretreatment of Natural Gas-Liquification (removal of H₂O, CO₂, H₂S & mercaptans)
- Supplement Animal Feed

برای ثبت سفارش مولکولارسیو می توانید با کارشناسان شرکت دموکریس تماس حاصل نمایید