



## 5A MOLSIIV™ ADSORBENT

### DESCRIPTION

5A MOLSIIV Adsorbent is a clay-bound calcium form of Type A molecular sieve. 5A molecular sieve will adsorb molecules with critical diameters up to 5 angstroms.

### APPLICATIONS

5A is the molecular sieve which made possible the separation of normal paraffins from branched-chain and cyclic hydrocarbons through a selective adsorption process. 5A is also recommended for use in pressure swing purification of hydrogen.

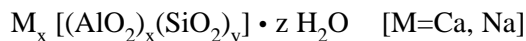
### TYPICAL PHYSICAL PROPERTIES

5A molecular sieve is available in extrudate form. The diameters for the extrudates or “pellets” are shown below; the length is approximately twice the diameter.

	<u>1/16” Pellets</u>	<u>1/8” Pellets</u>
Nominal pore diameter (angstroms)	5	5
Typical particle diameter (mm)	1.6	3.2
Bulk density (lbs/ft <sup>3</sup> )	44	44
Heat of adsorption (Btu/lb H <sub>2</sub> O)	1800	1800
Crush strength (lbs)	6	12
Equilibrium H <sub>2</sub> O capacity* (wt-% )	21.5	21.5
Moisture content (wt-%)	1	1

\*Measured at 17.5 mm Hg and 25°C.

### CHEMICAL FORMULA



### REGENERATION

5A molecular sieve can be regenerated for re-use by purging or evacuating at elevated temperatures. The degree of regeneration is dependent on the temperature and humidity of the purge gas.

### SAFETY AND HANDLING

See the UOP brochure “Precautions and Safe Practices for Handling Molecular Sieves in Process Units” or call your UOP representative.

### SHIPPING INFORMATION

5A is shipped in steel drums or Quick-Load bags.

### FOR MORE INFORMATION

UOP offers specialty 5A products: 5A-50 for purification of saturated hydrocarbons; 5A-MG for oxygen concentration. For more information on any of these products, contact your UOP representative, or UOP’s Adsorbents business at:

Telephone: 1-440-734-0086  
Fax: 1-440-734-1688  
E-mail: Adsorbents@uop.com