

Type 3A Molecular Sieve

$K_{12}[(AlO_2)_{12}(SiO_2)_{12}] \cdot X H_2O$ —Molecular Sieve Type 3A, the potassium form of the Type A Crystal structure, is an alkali metal aluminosilicate. Available in powder and pellets for commercial dehydration of unsaturated hydrocarbon streams such as cracked gas, propylene, butadiene and acetylene. Type 3A is also used for drying polar liquids such as methanol and ethanol.

Typical Physical Properties

	Powder	1/16" Pellets	1/8" Pellets
Nominal Pore Diameter (angstroms)	3	3	3
Particle Diameter *(mm)	—	1.6	3.2
Particle Size (microns)	<10	—	—
Bulk Density (lb/ft ³)	35	40	40
Heat of Adsorption (Btu/lb H ₂ O)	—	1800	1800
Crush Strength (lbs)	N/A	10	20
Equilibrium H ₂ O Capacity ** (wt-%)	25.5	21	21
Moisture Content (wt-%)	1	1	1

* The length of the pellets is approximately twice the diameter.

** Measured at 17.5 mm Hg and 25°C

Part No.	Quantity	Form
MS-1001	1/2 lb.	Powder
MS-1002	1/2 lb.—Case of 6	
MS-1003	2 lb.	
MS-1004	2 lb.—Case of 4	
MS-1005	12 lb.	
MS-1006	30 lb.	
MS-1014	1 lb.	1/16" Pellets
MS-1015	1 lb.—Case of 6	
MS-1016	5 lb.	
MS-1017	5 lb.—Case of 4	
MS-1018	25 lb.	
MS-1020	50 lb.	

Part No.	Quantity	Form
MS-1028	1 lb.	1/8" Pellets
MS-1029	1 lb.—Case of 6	
MS-1030	5 lb.	
MS-1031	5 lb.—Case of 4	
MS-1032	25 lb.	
MS-1034	50 lb.	

Type 3A Molecular Sieves are available packaged in 55-gallon drums - Contact Advanced Specialty Gas Equipment for price and availability.

Safety and Handling

See the UOP brochure entitled "Molecular Sieve Safety Bulletin for Manufacturers", or contact your Advanced representative.

For More Information

For additional information, see MATERIAL SAFETY DATA SHEET (MSDS) for this material listed on the Advanced website; www.asge-online.com or contact your Advanced representative.