

Type 13X Molecular Sieve

$\text{Na}_{86}[(\text{AlO}_2)_{86}(\text{SiO}_2)_{106}] \cdot \text{X H}_2\text{O}$ —Molecular Sieve Type 13X, the sodium form of the Type X crystal structure, is an alkali metal aluminosilicate. Available in powder, pellets and beads. Used commercially for general gas drying; air plant feed purification (simultaneous removal of H_2O and CO_2); and liquid hydrocarbon and natural gas sweetening (H_2S and mercaptan removal). The 13X can adsorb both the moisture and polymerization by-products such as acetaldehyde and ethylene glycol. Its exceptional product strength makes it ideal for sachet and other custom packaged desiccating needs.

Typical Physical Properties

	Powder	1/16" Pellets	1/8" Pellets	4 x 8 Beads	8 x 12 Beads
Nominal Pore Diameter (angstroms)	8	8	8	8	8
Particle Diameter *(mm)	—	1.6	3.2	4.0	2.0
Particle Size (microns)	<10	—	—	—	—
Bulk Density (lb/ft ³)	—	40	40	40	40
Heat of Adsorption (Btu/lb H ₂ O)	1800	1800	1800	1800	1800
Crush Strength (lbs)	N/A	7	15	18	8
Equilibrium H ₂ O Capacity ** (wt-%)	30	26	26	26	26
Moisture Content (wt-%)	2.5	1	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-1328	1/2 lb.	Powder
MS-1329	1/2 lb.—Case of 6	
MS-1330	2 lb.	
MS-1331	2 lb.—Case of 4	
MS-1332	12 lb.	
MS-1333	30 lb.	
MS-1341	1 lb.	1/16" Pellets
MS-1342	1 lb.—Case of 6	
MS-1343	5 lb.	
MS-1344	5 lb.—Case of 4	
MS-1345	25 lb.	
MS-1347	50 lb.	
MS-1355	1 lb.	1/8" Pellets
MS-1356	1 lb.—Case of 6	
MS-1357	5 lb.	
MS-1358	5 lb.—Case of 4	
MS-1359	25 lb.	
MS-1361	50 lb.	

Part No.	Quantity	Form
MS-1362	1 lb.	4 x 8 Beads
MS-1363	1 lb.—Case of 6	
MS-1364	5 lb.	5 lb.—Case of 4
MS-1365	5 lb.—Case of 4	
MS-1366	25 lb.	
MS-1368	50 lb.	
MS-1369	1 lb.	8 x 12 Beads
MS-1370	1 lb.—Case of 6	
MS-1371	5 lb.	5 lb.—Case of 4
MS-1372	5 lb.—Case of 4	
MS-1373	25 lb.	
MS-1375	50 lb.	
Type 13X 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.