

**Technical Parameter:**

**3A Molecular Sieve**, is an alkali metal alumina silicate. It is the potassium form of the type A crystal structure. It has an effective pore opening of about 3 angstroms (0.3nm). This is large enough to allow in moisture, but excludes molecules such as unsaturated hydrocarbons which can potentially form polymers.



Model	3A Molecular Sieve			
	Sphere	Pellet		
Nominal pore diameter	3 angstroms			
Shape	Sphere	Pellet		
Diameter	1.7-2.5 (mm)	3.0-5.0 (mm)	1.6 (mm)	3.2 (mm)
	8*12 (mesh)	4*8 (mesh)	1/16 (inch)	1/8 (inch)
Bulk density (g/ml)	≥0.70	≥0.70	≥0.68	≥0.68
Crushing strength (N/PC)	≥55.0	≥85.0	≥30.0	≥50.0
Size ratio up to grade (%)	≥98.0	≥98.0	≥96.0	≥96.0
Static H2O adsorption (%)	≥21.0	≥21.0	≥21.0	≥21.0
H2O content (%)	≤1.5	≤1.5	≤1.5	≤1.5
Wear ratio (%)	≤0.25	≤0.25	≤0.25	≤0.25

**Technical Parameter:**

**4A Molecular Sieve**, is an alkali alumina silicate. It is the sodium form of the type A crystal structure. It has an effective pore opening of about 4 angstroms(0.4nm). It will adsorb most molecules with a kinetic diameter of less than 4 angstroms and exclude those larger.



Model	4A Molecular Sieve			
	Sphere		Pellet	
Nominal pore diameter	4 angstroms			
Shape	Sphere		Pellet	
Diameter	1.7-2.5 (mm)	3.0-5.0 (mm)	1.6 (mm)	3.2 (mm)
	8*12 (mesh)	4*8 (mesh)	1/16 (inch)	1/8 (inch)
Bulk density (g/ml)	≥0.70	≥0.70	≥0.68	≥0.68
Crushing strength (N/PC)	≥35.0	≥80.0	≥30.0	≥70.0
Size ratio up to grade (%)	≥98.0	≥98.0	≥96.0	≥96.0
Static H2O adsorption (%)	≥21.5	≥21.5	≥21.5	≥21.5
H2O content (%)	≤1.5	≤1.5	≤1.5	≤1.5
Wear ratio (%)	≤0.40	≤0.40	≤0.40	≤0.40

**Technical Parameter:**

**5A Molecular Sieve**, is an alkali alumina silicate. It is the calcium form of the type A crystal structure. It has an effective pore opening of 5 angstroms (0.5nm). It will adsorb molecules with a kinetic diameter of less than 5 angstrom and exclude those larger.



Model	5A Molecular Sieve			
	Sphere	Sphere	Pellet	Pellet
Nominal pore diameter	5 angstroms			
Shape	Sphere	Sphere	Pellet	Pellet
Diameter	1.7-2.5 (mm)	3.0-5.0 (mm)	1.6 (mm)	3.2 (mm)
	8*12 (mesh)	4*8 (mesh)	1/16 (inch)	1/8 (inch)
Bulk density (g/ml)	≥0.66	≥0.66	≥0.64	≥0.64
Crushing strength (N/PC)	≥30.0	≥70.0	≥30.0	≥50.0
Size ratio up to grade (%)	≥98.0	≥98.0	≥96.0	≥96.0
Static H <sub>2</sub> O adsorption (%)	≥21.5	≥21.5	≥21.5	≥21.5
H <sub>2</sub> O content (%)	≤1.5	≤1.5	≤1.5	≤1.5
Wear ratio (%)	≤0.20	≤0.20	≤0.20	≤0.20

**Technical Parameter:**

**13X Molecular Sieve**, is the sodium form of the type X crystal and has a much larger pore opening than the type A crystals. It will adsorb molecules with a kinetic diameter of less than 10 Angstrom(1.0nm) and exclude those larger.



Model	13X Molecular Sieve			
	Sphere		Pellet	
Nominal pore diameter	10 angstroms			
Shape	Sphere		Pellet	
Diameter	1.7-2.5 (mm)	3.0-5.0 (mm)	1.6 (mm)	3.2 (mm)
	8*12 (mesh)	4*8 (mesh)	1/16 (inch)	1/8 (inch)
Bulk density (g/ml)	≥0.66	≥0.66	≥0.64	≥0.64
Crushing strength (N/PC)	≥25.0	≥80.0	≥25.0	≥45.0
Size ratio up to grade (%)	≥98.0	≥98.0	≥96.0	≥96.0
Static H2O adsorption (%)	≥25	≥25	≥25	≥25
H2O content (%)	≤1.5	≤1.5	≤1.5	≤1.5
Wear ratio (%)	≤0.20	≤0.20	≤0.20	≤0.20