**Type 5A Molecular Sieve**

\[ Ca_{4.5}Na_{3.5}[AlO_2]_{12}(SiO_2)_{12} \times xH_2O \]—Molecular Sieve Type 5A, the calcium form of the Type A crystal structure, is an alkali metal alumino-silicate. Available in powder and pellets for separating normal paraffins from branched-chain and cyclic hydrocarbons through a selective adsorption process.

### Typical Physical Properties

<table>
<thead>
<tr>
<th></th>
<th>Powder</th>
<th>1/16” Pellets</th>
<th>1/8” Pellets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Pore Diameter (angstroms)</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Particle Diameter <em>(mm)</em></td>
<td>—</td>
<td>1.6</td>
<td>3.2</td>
</tr>
<tr>
<td>Particle Size (microns)</td>
<td>&lt;10</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Bulk Density (lb/ft³)</td>
<td>32</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Heat of Adsorption (Btu/lb H₂O)</td>
<td>—</td>
<td>1800</td>
<td>1800</td>
</tr>
<tr>
<td>Crush Strength (lbs)</td>
<td>N/A</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Equilibrium H₂O Capacity ** (wt-%)</td>
<td>26</td>
<td>21.5</td>
<td>21.5</td>
</tr>
<tr>
<td>Moisture Content (wt-%)</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

* The length of the pellets is approximately twice the diameter.
** Measured at 17.5 mm Hg and 25°C

### Part No. | Quantity Form
---|---
MS-1179 | 1/2 lb. Powder
MS-1180 | 1/2 lb.—Case of 6
MS-1181 | 2 lb.
MS-1182 | 2 lb.—Case of 4
MS-1183 | 12 lb.
MS-1184 | 30 lb.
MS-1192 | 1 lb. 1/16” Pellets
MS-1193 | 1 lb.—Case of 6
MS-1194 | 5 lb.
MS-1195 | 5 lb.—Case of 4
MS-1196 | 25 lb.
MS-1198 | 50 lb.

### Part No. | Quantity Form
---|---
MS-1206 | 1 lb. 1/8” Pellets
MS-1207 | 1 lb.—Case of 6
MS-1208 | 5 lb.
MS-1209 | 5 lb.—Case of 4
MS-1210 | 25 lb.
MS-1212 | 50 lb.

Type 5A 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.