BASF 5A Molecular Sieve

BASF 5A Molecular Sieve is a synthetic crystalline aluminosilicate with a regular micropore structure.

**Zeolite Structure**
- A type (LTA)

**Pore Size**
- 5 Å (0.5 nm)

**Chemical Formula**
- \( x \text{CaO} \cdot (1 - x) \text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2 \text{SiO}_2 \cdot n \text{H}_2\text{O}, x \geq 0.65 \)

**Product Applications**

BASF 5A Molecular Sieve is commonly used for drying and desulphurization (H2S) of natural gas, for the manufacture of protective gases and for the removal of CO2. BASF 5A Molecular Sieve is also used for the separation of normal paraffins from branched and cyclic hydrocarbons.

BASF 5A Molecular Sieve is used for the selective adsorption and separation of polar molecules from mixtures with adsorbable but less polar molecules (e.g. preferred adsorption of H2S in presence of CO2).

**Regeneration**

Regeneration of BASF 5A Molecular Sieve may be carried out by increasing the temperature and/or reducing the pressure or using a suitable purge gas, respectively.

**Packaging**
- 216 L (135 kg) air tight steel drums
- Polypropylene inliner equipped big bags of different sizes (650 – 800 kg net)

**Typical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beads Size Range, nominal, mm</td>
<td>1.6 - 2.5</td>
</tr>
<tr>
<td>Mesh Range, approx</td>
<td>8 x 12</td>
</tr>
<tr>
<td>Bulk Density, compacted, g/L</td>
<td>720-800</td>
</tr>
<tr>
<td>Attrition, % wt.</td>
<td>Max 0.2</td>
</tr>
<tr>
<td>Crush Strength, N/bead</td>
<td>Min 25</td>
</tr>
<tr>
<td>Moisture Content (as delivered, % wt)</td>
<td>Max 1.0</td>
</tr>
<tr>
<td>Water Adsorption Capacity*, 55% relative humidity, 20 °C, % wt</td>
<td>Min 20.5</td>
</tr>
</tbody>
</table>

* Sample activated. Other beads and sizes available on request.
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