Selexsorb® CDL

Alumina based adsorbent for the removal of polar compounds.

BASF Selexsorb® CDL is custom-formulated to provide optimum adsorption of a number of polar compounds from reactive olefinic streams.

BASF Selexsorb CDL is available in nominal sizes of 7 x 14 Tyler mesh (approx. 1.6 mm) and 1/8" (3.2 mm) spheres.

Selexsorb CDL provides the benefits of enhanced capacity for impurities with reduced surface activity, providing longer life with higher capacity. CDL is the preferred Selexsorb for removing polar contaminants from reactive process streams, especially butenes, propylene and ethylene. Typical contaminants to be removed with Selexsorb CDL include: water, oxygenates (alcohols, aldehydes, ketones, ethers, peroxides), mercaptans, sulfides and nitrogen based molecules (ammonia, amines, nitriles).

Product Applications

1. The C4 raffinate stream for metathesis processes contain oxygenates which require removal to assure a contaminant-free feed stream for optimal catalyst activity and life. Removal of oxygenates such as methanol, dimethyl ether, tertiary butyl alcohol, acetaldehyde and ketones from this C4 raffinate stream can be accomplished by the use of BASF Selexsorb CDL. In the presence of reactive olefinic species Selexsorb CDL offers better capacity and performance than Selexsorb CD or CDX and thus is the preferred solution for these applications.

2. Hydrocarbon feed streams to petrochemical catalytic processes often contain oxygenated organic compounds and other trace contaminants which can cause catalyst deactivation and other process unit performance problems. BASF Selexsorb CDL combines excellent capacity for alcohols, carbonyls, ethers and carboxylic acids from gas and liquid feed streams.

3. Hydrocarbon feed streams to refining catalytic processes frequently contain trace contaminants that can adversely affect the performance of downstream catalysts. BASF Selexsorb CDL is an excellent adsorbent for removing trace oxygenates, sulfides, mercaptans and other such species from feed streams to isomerization and alkylation processes.

4. BASF Selexsorb CDL is custom formulated to remove trace contaminants from feed monomer, feed comonomer and recycle solvent streams in a number of polymer production processes including polyethylene and polypropylene. Polymerization catalyst deactivation is minimized through the removal of these contaminants with BASF’s Selective Adsorbents.

Selexsorb CDL can also be used in combination with Selexsorb COS or Selexsorb COSi. for further information, please contact BASF.

For proper handling of the material, especially when bringing the adsorbent in contact with olefins, please contact BASF for further details.

Packaging
- 1900 lb super sacks

Shipping Point
- Vidalia, LA, U.S.A.
## Chemical Composition (%)

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{Al}_2\text{O}_3$ plus proprietary modifier</td>
<td>95.5</td>
</tr>
<tr>
<td>LOI (250-1100° C)</td>
<td>4.0</td>
</tr>
</tbody>
</table>

## Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Area, m²/g</td>
<td>460</td>
</tr>
<tr>
<td>Crush Strength, lbs (kg)</td>
<td>9 (4)</td>
</tr>
<tr>
<td>Bulk Density, lbs/ft³ (kg/m³)</td>
<td>43 (689)</td>
</tr>
</tbody>
</table>
About Us

BASF’s Catalysts division is the world’s leading supplier of environmental and process catalysts. The group offers exceptional expertise in the development of technologies that protect the air we breathe, produce the fuels that power our world and ensure efficient production of a wide variety of chemicals, plastics and other products, including advanced battery materials. By leveraging our industry-leading R&D platforms, passion for innovation and deep knowledge of precious and base metals, BASF’s Catalysts division develops unique, proprietary solutions that drive customer success.

BASF - We create chemistry

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