

# **Product Data Sheet**

# Selexsorb® CD

# Alumina based adsorbent for the removal of polar compounds

BASF Selexsorb<sup>®</sup> CD is custom formulated to provide optimum adsorption for a number of polar compounds (containing O, N or S) from hydrocarbon streams.

BASF Selexsorb® CD is available as spheres with nominal sizes of 1/16" (7 x 14 Mesh), 1/8" and 3/16".

### **Product Applications**

1. Hydrocarbon feed streams to petroleum refining catalytic processes often contain oxygenated organic compounds and other trace contaminants which can cause catalyst deactivation and other process unit performance problems.

BASF Selexsorb® CD is an excellent adsorbent for the removal of alcohols, aldehydes, ketones, ethers, and various other carboxylic acids from the liquid hydrocarbon feed streams to isomerization and alkylation processes.

BASF Selexsorb® CD is also appropriate for the removal of water and mercaptans from these feed streams.

2. The C<sub>4</sub> raffinate stream from MTBE (methyl tertiary butyl ether) manufacturing processes contain oxygenates which often require removal to assure a contaminant-free feed stream to petroleum refining and petrochemical processes. Removal of oxygenates such as methanol, dimethyl ether, tertiary butyl alcohol and MTBE process is removal of nitroen based contaminants, such as acetonitrile and ammonia, from the C4 feed stream.

- 3. BASF Selexsorb® CD adsorbent has been found to be outstanding in its ability to remove water and trace contaminants from carbon dioxide. The resultant high purity CO<sub>2</sub> is far superior to the product produced with conventional adsorbents.
- 4. BASF Selexsorb® CD is custom formulated to remove oxygenated organic compounds (alcohols, ethers, aldehydes, carbonyls, ketones, peroxides, etc.) from fee monomer, feed comonomer, and recycle solvent streams in a number of polymer production processes, including polyethylene and polypropylene. Polymerization catalyst deactiviation is minimized through removal of these contaminants with BASF's selective adsorbents.

Selexsorb<sup>®</sup> CD can also be used in combination with Selexsorb<sup>®</sup> COS or Selexsorb<sup>®</sup> COS*i*. For further information, please contact BASF.

The maximum temperature during regeneration should be limited to 340°C / 640°F.

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



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Chemical Composition (%)			
Al <sub>2</sub> O <sub>3</sub> plus proprietary modifier		95.1	
LOI (250-1100° C)		4.5	
Typical Physical Properties	7x14 Tyler Mesh (2.0mm)	1/8" (3.2mm)	3/16" (4.8 mm)
Surface Area, m²/g	420	410	400
Crush Strength, lbs (kg)	10 (5)	25 (11)	45 (20)
Bulk Density, lbs/ft³ (kg/m³)	43 (689)	43.5 (697)	43.5 (697)

# **Packaging**

- 1900 lb (861.826 kg ) FIBC (super sacks)
- 300 lb (136.078 kg ) steel drums

# **Shipping Point**

Vidalia, LA, U.S.A. or Natchez, MS, U.S.A.

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