

Technical Data Sheet

Selexsorb[®] COS*i*

Smooth, spherical adsorbent for the removal of COS, H₂S and CO₂

BASF Selexsorb[®] COSi is a smooth, spherical adsorbent which shows outstanding performance in removing selectively COS, CO₂, H₂S and CS₂ from hydrocarbon streams.

BASF Selexsorb[®] COS*i* is available as 7x14 Tyler Mesh and 1/8-inch spheres.

Applications

Selexsorb[®] COS*i* can be used in a wide variety of different applications. In the following some of these are indicated:

- An important application is the use as adsorbent for the removal of CO₂ from ethylene in front of PE units. Levels as low as 20 ppb are possible. Selexsorb[®] COS*i* can be used in combination with Selexsorb[®] CD or CDL for the removal of water and oxygenates, like methanol.
- Another application is the removal of COS from propylene in front of PP units. The removal of COS is an important part of the protection of newer generation Ziegler-Natta and metallocene based catalysts. When used in combination with PuriStar[®] R3-12, COS levels of 10 ppb or less can easily be achieved. Selexsorb[®] COS*i* can here again be used in combination with Selexsorb[®] CD or CDL.
- 3. Selexsorb[®] *COSi* can also be used in the treatment of comonomers for removing COS and H₂S impurities.
- In on-purpose units producing propylene via dehydrogenation or metathesis, Selexsorb[®] COS*i* can be used to remove COS or H₂S.

- Selexsorb[®] COS*i* can remove COS or CS₂ from olefinic C4 streams used in different applications in petrochemical or refinery units.
- In catalytic reforming processes, Selexsorb[®] COS*i* will be effective in adsorbing H₂S and water from the H₂ recycle stream.

Packaging

- 1750 lbs (793,787 kg) big bags
- 320 lbs (1/8": 145,125 kg, 7x14M: 145 kg) steel drums

Shipping Point

Vidalia, LA, USA

Chemical Composition	
A ₁₂ O ₃ plus proprietary modifier ~ 93	
Lol (250 – 1100°C)	~ 6.0
Typical Physical Properties	
Surface Area, m²/g	~ 250
Crush Strength, lbs (kg)	4 - 11 (2-5)
	7x14 M.: ~ 42 (670)
Bulk Density, lbs/ft ³ (kg/m ³)	1/8": ~ 44 (710) 1/8"

About Us

BASF is a leading global manufacturer of catalysts for the chemical industry, with solutions across the chemical value chain. The business comprises chemical catalysts and adsorbents, refinery catalysts and custom catalysts. In the process catalyst business, priority is given to developing new and improved products that enable the chemical industry transformation to net zero emissions.

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