

Selexsorb COS

Smooth, spherical adsorbent for the removal of COS

BASF Selexsorb® COS is a smooth, spherical adsorbent which is a standard in industry in selectively removing COS, CO₂, H₂S, and CS₂ from hydrocarbon streams.

BASF Selexsorb COS is available as spheres with nominal sizes of 7 x 14 Tyler mesh and 1/8-inch.

BASF Selexsorb COS is typically used to remove impurities like CO₂, H₂S, COS and CS₂ in regenerative mode from ppm levels down to sub-ppm levels.

Product Applications

Selexsorb COS can be used in a wide variety of different applications. In the following some of these are indicated in more detail:

1. 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 v/v have been observed.
2. Selexsorb COS is also often used for 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 or metallocene based catalysts. When used in combination with sacrificially used PuriStar R3-12/R3-22, COS levels of 10 ppb or less can easily be achieved.
3. BASF Selexsorb COS is widely used in units recovering ethylene or propylene from streams generated in refinery cracking units (e.g. FCC).
4. In on-purpose units producing propylene via dehydrogenation or metathesis, Selexsorb COS is regularly used to remove COS or H₂S.
5. In catalytic reforming process, Selexsorb COS is effective in adsorbing H₂S and water from the H₂ recycle stream.

To discuss your specific application, please contact BASF.

Selexsorb COS is often used in combination with Selexsorb CD or Selexsorb CDL.

An improvement in specific loading costs and performance can be achieved by choosing Selexsorb COS_i over Selexsorb COS.

Packaging

- 2 000 lb (907.185 kg) super sack (FIBC)
- 375 lb (170.098 kg) steel drum

Chemical Composition (%)

Al₂O₃ plus proprietary modifier	93.1
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LOI (250-1100° C)	6.5
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Typical Physical Properties	7 x 14 Tyler mesh (2.0 mm)	1/8" (3.2mm)
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Surface Area, m²/g	275	260
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Crush Strength, lbs (kg)	9 (4)	28 (13)
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Bulk Density, lbs/ft³ (kg/m³)	49 (785)	49 (785)
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The indications provided represent typical values and are not to be used in lieu of a specification.

Shipping Point

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

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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