

## Selexsorb<sup>®</sup> COS*i*

Smooth, spherical adsorbent for the removal of COS, H<sub>2</sub>S and CO<sub>2</sub>

**BASF Selexsorb<sup>®</sup> COS*i* is a smooth, spherical adsorbent which shows outstanding performance in removing selectively COS, CO<sub>2</sub>, H<sub>2</sub>S and CS<sub>2</sub> from hydrocarbon streams**

BASF Selexsorb<sup>®</sup> COS*i* is available as 7x14 Tyler Mesh and 1/8 inch spheres.

### Applications

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

**1.** An important application is the use as adsorbent for the removal of CO<sub>2</sub> from ethylene in front of PE units. Levels as low as 20 ppb are possible. Selexsorb<sup>®</sup> COS*i* can be used in combination with Selexsorb<sup>®</sup> CD or CDL for the removal of water and oxygenates, like methanol.

**2.** 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<sup>®</sup> COS*i* can here again be used in combination with Selexsorb<sup>®</sup> CD or CDL.

**3.** Selexsorb<sup>®</sup> COS*i* can also be used in the treatment of comonomers for removing COS and H<sub>2</sub>S impurities.

**4.** In on-purpose units producing propylene via dehydrogenation or metathesis, Selexsorb<sup>®</sup> COS*i* can be used to remove COS or H<sub>2</sub>S.

**5.** Selexsorb<sup>®</sup> COS*i* is able to remove COS or CS<sub>2</sub> from olefinic C4 streams used in different applications in petrochemical or refinery units.

**6.** In catalytic reforming processes, Selexsorb<sup>®</sup> COS*i* will be effective in adsorbing H<sub>2</sub>S and water from the H<sub>2</sub> recycle stream.

Selexsorb<sup>®</sup> COS*i* can replace Selexsorb<sup>®</sup> COS in all existing applications. Please contact BASF for further details.

### Chemical Composition

|  |      |
|--|------|
| Al <sub>2</sub> O <sub>3</sub> plus proprietary modifier | ~ 93 |
|--|------|

|                    |       |
|--------------------|-------|
| LoI (250 – 1100°C) | ~ 6.0 |
|--------------------|-------|

### Typical Physical Properties

|                                 |     |
|---------------------------------|-----|
| Surface Area, m <sup>2</sup> /g | 250 |
|---------------------------------|-----|

|                          |              |
|--------------------------|--------------|
| Crush Strength, lbs (kg) | 4 - 11 (2-5) |
|--------------------------|--------------|

|  |          |
|--|----------|
| Bulk Density, lbs/ft <sup>3</sup> (kg/m <sup>3</sup> ) | 42 (670) |
|--|----------|

### Packaging

- 1750 lbs (793.787 kg) big bags
- 320 lbs (145.125 kg) steel drums

### Shipping Point

- Vidalia, LA, USA

## 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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