Cu-0226 S

Copper Oxide Impregnated Spheres

BASF Cu-0226 S is a highly dispersed copper oxide impregnated on a high surface alumina used primarily for removing traces of O₂ in inert gases like nitrogen.

BASF Cu-0226 S is available in spheres with a nominal diameter of 8x14 mesh (1.2 – 2.4 mm) or 14x28 mesh (0.6–1.2 mm).

Cu-0226 S has originally been developed by Dow and has also been referred to as Q5.

Product Applications

1. Removal by chemisorption of O₂ from inert gases at ambient temperatures e.g. when used in glove boxes.
2. Catalytic removal of O₂ from gases at temperatures beyond 100°C/210 F

Pre-Treatment

Before use as oxygen scavenger, the copper oxide needs to be reduced according to the following reaction:

\[ \text{CuO} + \text{H}_2 \rightarrow \text{Cu} + \text{H}_2\text{O} \]

This activation step is generally carried out by heating to 200°C/400 F with a flow of inert gas (typically a nitrogen stream) containing 2 - 4 vol. % H₂, depending on the size of the vessel and the respective heat losses.

When used for the removal of H₂S, COS and halides, a drying step with an inert gas at temperatures up to 200°C is recommended.

Typical Properties

<table>
<thead>
<tr>
<th>Chemical</th>
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<tbody>
<tr>
<td>CuO</td>
<td>Approx 10%</td>
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<tr>
<td>Alumina and Promoters</td>
<td>Balance</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Physical</th>
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<tbody>
<tr>
<td>Surface Area</td>
<td>Approx 200 m²/g</td>
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<tr>
<td>Packed ABD</td>
<td>Approx 0.85 kg/L</td>
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</tbody>
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Packaging (Typical)

- 100 lb drum

Shipping Point

- Elyria, Ohio, 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.

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