

## PuriStar® R3-11 T5x3

### CuO Tablets

**BASF PuriStar® R3-11 is a high-performance material used for the removal of trace impurities from gases and liquids.**

BASF PuriStar® R3-11 is offered in tablet form. Each tablet has a nominal diameter of 5 mm and a height of 3 mm (approx. 3/16" x 1/8"). The material is of greenish color.

#### Product Applications

PuriStar® R3-11 is a robust copper based adsorbent for the removal of trace impurities from gases and gas mixtures. These trace impurities may be sulfur compounds and/or arsine compounds. Gases of ultra-high purity are produced easier using this method than with other existing processes.

In addition to removal of trace impurities, R3-11 provides a beneficial visual indicator function. Depending on the application, the material can change from black to green, or vice versa, during use. This change of color provides a simple visual cue signaling the need to reactivate or dispose of the catalyst.

For example, R3-11 can be used to remove oxidizing agents, such as oxygen from process streams. For this application, R3-11 is first activated by reduction, which changes its color from the green native state to the black activated state. During use, as the activated state is expended, the green color reappears, signaling the need for catalyst regeneration. R3-11 has an excellent stability of its matrix, which enables excellent repeated regenerations and long-term operation at temperatures as high as 275°C (530°F).



#### Typical Properties

##### Chemical

**CuO** Approx. 45 %

**Mg-Silicate and Promoters** Rest

##### Physical

**Crush Strength** Approx. 5.0 kg  
(11 lbs), side wall

**Bulk Density** ~ 800 kg/m<sup>3</sup>  
(50 lbs/ft<sup>3</sup>), tapped  
~ 740 kg/m<sup>3</sup>  
(46 lbs/ft<sup>3</sup>), sock loaded

#### Packaging

- 90 kg net (198.5 lbs) in 120-liter steel drums

#### Delivery Point

- Ludwigshafen, Germany

## 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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