

Product Data Sheet

Zn 9201

Sulfur Adsorbent

BASF Zn 9201 is a zinc oxide based adsorbent for the removal of hydrogen sulfide from hydrocarbon feedstocks.

Zn 9201 is produced as extrudates with a nominal diameter of 4 mm

Product Applications

Zn 9201 is specifically used for the adsorption of H_2S (hydrogen sulfide) from different streams containing either hydrocarbons or hydrogen or mixtures thereof.

The mechanism of adsorption can be described as follows:

(1)
$$ZnO + H_2S \rightarrow ZnS + H_2O$$

As the feed gas passes through the adsorbent bed, hydrogen sulfide is irreversibly adsorbed by the active zinc oxide particles within the catalyst. This reaction starts at the outer surface and proceeds to the core of the adsorbent. Since diffusion of hydrogen sulfide through the matrix is a slow process, more high-activity zinc oxide sites need to be available to maximize the sulfur adsorption. Zn 9201 is designed with this in mind as it provides an optimal surface area of highly active zinc oxide for maximal sulfur pickup.

To maximize performance, higher temperatures are recommended. Zn 9201 can be used up to temperatures of 400°C / 750°F.

Typical Properties	
Chemical	
ZnO wt. %	≥ 95
Physical	
Surface Area, m ² /g	30 m²/g
Bulk Density	~ 1150 kg/m³ (~ 72 lbs/cuft)
Crush Strength	At least 40 N/cm

^{*} These indicative properties do not represent process capabilities nor specifications.

Packaging

Steel drums, 200kg net

Shipping Point

BASF warehouse, The Netherlands

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

Americas

BASF Corporation 25 Middlesex/Essex Turnpike Iselin, New Jersey, 08830, USA

Tel: +1-732-205-5000 Fax: +1-732-205-7725

Email: catalysts-americas@basf.com

Asia Pacific

BASF (China) Company Limited 300 Jiang Xin Sha Road, Pudong, Shanghai 200137 P.R. China

Tel: +86-21-2039 2549 Fax: +86-21-2039 4800-2549 Email: catalysts-asia@basf.com

Europe, Middle East, Africa

BASF De Meern BV Catalysts The Netherlands Tel: +31-30-666 9437

Email: catalysts-europe@basf.com

Although all statements and information in this publication are believed to be accurate and reliable, they are presented gratis and for guidance only, and risks and liability for results obtained by use of the products or application of the suggestions described are assumed by the user. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH. Statements or suggestions concerning possible use of the products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that toxicity data and safety measures are indicated or that other measures may not be required. © 2015 BASF