

## **Product Data Sheet**

# S-100 SR

## Promoted activated alumina catalyst

BASF S-100 SR is a high surface area, promoted activated alumina catalyst used to scavenge oxygen in Claus alumina catalyst beds. S-100 SR is available as 3/16 inch spheres.

#### **Applications**

The reaction of oxygen with  $SO_2$  on the catalyst surface to form sulfate is one of the primary reasons for loss of catalytic activity. S-100 SR is applied as a guard layer of 9-12 inches on the top of the Claus catalyst converter to react with oxygen, thereby preventing sulfation of the alumina catalyst and preventing loss of catalytic activity.

It is especially advantageous to use S-100 SR in Claus plants where direct reheat is used. This method of reheat makes it difficult to prevent oxygen breakthrough into the catalyst bed. On any converters where oxygen infiltration is a problem, this promoted catalyst is particularly effective in preventing sulfate formation on the activated alumina catalyst installed.

### **Available Packaging**

- 2000 lb super sacks
- 350 lb steel drums

Chemical Composition (wt %)		
Al <sub>2</sub> O <sub>3</sub> + promoter	93.5	
SiO <sub>2</sub>	0.015	
LOI (1000° C)	6.0	

Physical Properties	3/16" (4.8mm)
Surface Area, m <sup>2</sup> /g	300
Total Pore Volume, cc/g	0.50
Crush Strength (5 mesh sphere), lbs (kg)	35 (16)
Abrasion Loss, wt %	0.7
Bulk Density, lbs/ft³ (kg/m³)	45 (720)

#### **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