



The Chemical Company

Product Data Sheet

DD-831

Promoted Claus catalyst spheres

BASF DD-831 is a high surface area activated alumina promoted to enhance the activity of Claus and related reactions. BASF DD-831 is available as 3/16 inch spheres.

Product Applications and Benefits

1. BASF DD-831 promoted alumina shows improved resistance to deactivation from sulfation in all phases of the Claus process.
2. BASF DD-831 promoted alumina is especially beneficial in giving greatly improved COS decomposition in the first catalytic converter.

With non-promoted alumina, the conversion of COS will gradually decrease with time, but high reactivity will remain for much longer periods of time with BASF DD-831. It may be used either in the whole converter bed or in a half bed configuration. If used only in the half bed, it should be placed in the bottom half for maximum effect. The upper section of the bed can be filled with BASF DD-431, a high activity, non-promoted alumina.

3. BASF DD-831 activated alumina may be used in a second or third reactor to give enhanced resistance to deactivation from sulfation. This is highly recommended when direct reheat systems are being used. The inherent resistance of this product can prolong the effective catalyst life by a factor of 3 when oxygen regress causes accelerated sulfation.

Available Packaging

- 2000 lb super sacks

Chemical Composition (%)

Al ₂ O ₃ + promoter	93
LOI (250-1100°C)	6.5

Physical Properties

Surface Area, m ² /g	320
Total Pore Volume, cc/g	0.50
Macroporosity > 750 Å, cc/g	0.1
Crush Strength, lbs (kg)	30 (14)
Abrasion Loss, wt %	0.5
Bulk Density, lbs/ft ³ (kg/m ³)	48 (770)

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. By leveraging our industry-leading R&D platforms, passion for innovation and deep knowledge of precious and base metals, BASF Catalysts develop unique, proprietary catalyst and adsorbent solutions that drive customer success.

BASF - The Chemical Company

BASF Catalysts Headquarters

BASF Catalysts
25 Middlesex/Essex Turnpike
Iselin, New Jersey, 08830, USA
Tel: +1-732-205-5000
Fax: +1-732-205-7725
Email: catalysts-america@basf.com

Asia Pacific

BASF East Asia Regional HQ Ltd.
45th Floor, Jardine House
No. 1 Connaught Place
Central, Hong Kong
Tel: +852-2731-0191
Fax: +852-2731-5634
Email: catalysts-asia@basf.com

Europe, Middle East, Africa

BASF SE
67056 Ludwigshafen, Germany
Tel: +49-621-60-21153
Fax: +49-621-60-43023
Email: catalysts-europe@basf.com

All data represents typical product properties and are based upon BASF standard test methods. All test methods are available upon request.

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. © 2009 BASF