

HF-200

Smooth, Spherical Alumina

BASF HF-200 is a smooth, spherical alumina which has demonstrated its value in removing free HF and organic fluorides from HF alkylation product streams.

Product Applications

- Both propane and butane streams from the HF alkylation process are treated to remove fluorides to meet product specifications.
- The mechanism of fluoride removal involves both adsorption and chemical reaction on the alumina. Organic fluorides and HF adsorb on the alumina. The organic fluorides react to form olefins and HF. HF reacts with the alumina, forming AlF_3 . The high surface area and pore size distribution of BASF HF-200 are designed to optimize the entire adsorption-reaction-conversion performance.
- The excellent physical strength of BASF HF-200 remains throughout the life of the alumina.
- Optimum operation is achieved through the use of 1/8" spheres of HF-200, and pressure drop and flow channeling are minimized by the uniform sphere size. Where throughput and pressure drop limitations are critical, the 3/16" sphere will also provide excellent performance.
- The low abrasion loss and low silica content contribute to longer service life and minimized plugging of valves due to alumina fines and SiF_4 formation, which can occur with softer, dustier, or less pure aluminas.

Available Packaging

- 2000 lb super sacks
- 350 lb steel drums

Typical Chemical Composition (%)

Al_2O_3	93.5
SiO_2	0.02
Fe_2O_3	0.02
Na_2O	0.30
LOI (250 – 1100°C)	6.0

Typical Physical Properties	1/8" (3.2mm)	3/16" (4.8mm)
Surface Area, m^2/g	340	330
Total Pore Volume, cc/g	0.5	0.5
Crush Strength, lbs (kg)	30 (14)	50 (23)
Abrasion Loss, wt %	<0.1	<0.1
Packed Bulk Density, lbs/ft^3 (kg/m^3)	46 (736)	46 (736)

About Us

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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-america@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

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