Borotec™

Fluid Catalytic Cracking (FCC) Catalyst for moderate contaminant applications

Borotec™ offers high performance for moderately contaminated feeds requiring maximum conversion.

Technology

Borotec features BASF’s novel technology BBT (Boron Based Technology) and builds upon the success of BoroCat™. BBT uses the chemistry of boron to provide metals passivation for lower hydrogen and coke yields.

BASF’s Borotec combines high activity, accessible zeolite with BBT to provide metals passivation and high conversion. This leads to lower coke and gas, and higher amounts of valuable liquid products. The catalyst is designed for moderate resid feeds, containing higher levels of metals such as nickel.

Borotec is an excellent fit for units that need flexibility to accommodate changing feed quality due to spot buying crudes or processing opportunity feedstocks. The metals passivating functionality of Borotec allows a wide range of feed processing capabilities to maximize profits with variable feed properties.

Applications

Borotec is optimized for moderate resid feed FCC applications and provides additional benefits:

- Units processing moderate or hydrotreated resid feeds
- Units processing variable feed quality requiring flexibility with metals passivation
- Units requiring metals passivation for lower hydrogen and coke yields
- Units desiring high conversion for improved liquid yields
- Ecat nickel levels 800-2,000 ppm

Typical properties*

<table>
<thead>
<tr>
<th>Chemical Composition</th>
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<tbody>
<tr>
<td>Al₂O₃, wt%</td>
<td>37-45</td>
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<tr>
<td>Na₂O, wt%</td>
<td>0.20-0.35</td>
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<tr>
<td>Surface Area, m²/g</td>
<td>250-350</td>
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<table>
<thead>
<tr>
<th>Density</th>
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<tbody>
<tr>
<td>ABD, g/cm³</td>
<td>0.65-0.80</td>
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<table>
<thead>
<tr>
<th>Particle Size</th>
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<tbody>
<tr>
<td>APS, μm</td>
<td>75</td>
</tr>
<tr>
<td>0-40, %</td>
<td>6-15</td>
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</tbody>
</table>

* Catalyst properties are customized to optimize performance depending on individual FCC unit requirements.
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

Asia Pacific
BASF South East Asia Pte Ltd
7 Temasek Boulevard
#35-01 Suntec Tower One
Singapore 038987

Europe, Middle East, Africa
BASF SE
67056 Ludwigshafen, Germany

Global Email
refining-catalysts@basf.com

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