Boroflex™

Fluid Catalytic Cracking (FCC) Catalyst for upgrading highly contaminated residue feeds

Boroflex uses the latest in metals passivation technology along with a coke-selective matrix to provide superior bottoms upgrading for residue feedstocks.

Technology

Boroflex is based upon BASF’s multi-award-winning Boron Based Technology (BBT). BBT uses the chemistry of boron to provide maximum metals tolerance for superior yields.

BASF’s Boroflex combines our coke-selective matrix, optimum pore structure, and metals passivation. The selective matrix and optimized porosity allows for high bottoms conversion of heavy residue (resid) feeds. The metals passivation technology handles even the harshest contamination of nickel and vanadium for low hydrogen and coke.

Boroflex is the right choice for units wanting to maximize valuable liquid products, including distillate yield, while reducing bottoms yield. The novel BBT metals passivation technology allows the processing of even the dirtiest feedstocks.

Applications

Boroflex is designed for FCC units desiring bottoms conversion for higher yields of valuable liquid products.

Boroflex is ideally suited for use in the following situations:

- units processing resid feedstocks looking to reduce slurry yield
- units wanting higher yields of valuable liquid products of LPG (liquefied petroleum gas) olefins, gasoline and distillate
- units with severe metals contamination concerns targeting lower hydrogen and coke

Typical Properties

<table>
<thead>
<tr>
<th>Chemical Composition</th>
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<tbody>
<tr>
<td>( \text{Al}_2\text{O}_3, \text{wt}% )</td>
</tr>
<tr>
<td>( \text{Na}_2\text{O}, \text{wt}% )</td>
</tr>
<tr>
<td>Surface Area, m(^2)/g</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Density</th>
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<tbody>
<tr>
<td>ABD, g cm(^{-3})</td>
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<table>
<thead>
<tr>
<th>Particle size*</th>
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<tbody>
<tr>
<td>APS, ( \mu \text{m} )</td>
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<tr>
<td>0-40, %</td>
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* 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

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