ZIP Olefins Additive

Fluid Catalytic Cracking (FCC) additive for LPG production and enhanced gasoline octane

ZIP Olefins Additive, a ZSM-5-based additive has a multi-stage phosphorous treatment to maximize propylene yield and gasoline octane from the FCC unit

Premium Technology

ZSM-5-based additives convert linear and near-linear gasoline range olefins into LPG olefins while also increasing gasoline octane. ZIP Olefins Additive maximizes these objectives with low dry gas yield and low fines make.

Improving Olefins Yield

ZIP Olefins Additive provides maximize propylene production at equal ZSM-5 zeolite content. BASF’s novel multi-stage phosphorous treatment provides targeted phosphorous addition, enhancing acid site strength and stability leading to increased propylene yield and selectivity as well as improved attrition resistance.

Combining the Benefits

ZIP Olefins Additive works best when combined with a base FCC catalyst that supplies maximum feed for cracking to LPG, such as one based on BASF’s award-winning and commercially-proven Distributed Matrix Structures (DMS) technology. DMS-based catalysts deliver increased gasoline yields and gasoline-range olefins providing maximum feed for ZIP Olefins Additive to convert LPG.

Packaging

- 55 gallon drums
- 1 ton super sacks
- 1 ton tote bins
- Bulk (greater than 15 tons)

<table>
<thead>
<tr>
<th>Typical Properties</th>
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<tbody>
<tr>
<td><strong>Surface Area</strong></td>
<td></td>
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<tr>
<td>TSA, m²/g</td>
<td>100</td>
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<tr>
<td><strong>Chemical Composition</strong></td>
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<tr>
<td>Na₂O, wt %</td>
<td>0.20</td>
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<tr>
<td><strong>Density</strong></td>
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<tr>
<td>ABD, g cm⁻³</td>
<td>0.80</td>
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<tr>
<td><strong>Particle size</strong></td>
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<tr>
<td>APS, μm</td>
<td>89</td>
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<tr>
<td>0-40, %</td>
<td>10</td>
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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

Distributed Matrix Structures is a trademark of BASF.

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