EnviroSOx

Fluid Catalytic Cracking (FCC) additive for the reduction of SOx emissions

EnviroSOx delivers high SOx reduction performance to cost-effectively assist refiners in meeting tightening air quality limits on FCC regenerator off-gas emissions.

Premium Technology with Reduced Rare Earth Content

EnviroSOx has two functions: SO\textsubscript{2} oxidation to SO\textsubscript{3} and SO\textsubscript{3} capture and release. Approximately 5 to 10 percent of the feed sulfur is retained in the coke and transferred to the regenerator where it is oxidized to SOx. EnviroSOx captures SOx in the FCC regenerator and releases the sulfur as hydrogen sulfide (H\textsubscript{2}S) in the FCC reactor. EnviroSOx can reduce the SOx in the FCC regenerator off-gas to below 25 ppm. The resulting increase in H\textsubscript{2}S is typically within the limits of the existing sulfur recovery system.

Maximum Results by Design

EnviroSOx is designed to provide a more cost-effective catalytic solution to SOx emission control with a lower rare earth content without sacrificing performance. EnviroSOx can either be pre-blended with BASF’s FCC catalysts or added separately to the FCC unit.

Combining the Benefits

Additional benefits can be achieved by matching EnviroSOx with BASF’s Distributed Matrix Structures™ (DMS)-based FCC catalysts. The high activity of DMS-based FCC catalysts diminishes or eliminates the dilution effect that FCC additives can have on the activity of other FCC catalysts in the system.

Packaging

- 55 gallon drums
- 1 ton super sacks
- 1 ton tote bins

Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Rare Earth Content</td>
<td>CeO\textsubscript{2}, wt %</td>
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<tr>
<td></td>
<td>Density</td>
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<tr>
<td></td>
<td>Particle size</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