

BoroCat[®]

Fluid Catalytic Cracking (FCC) Catalyst for high metal, resid feed applications

Building on our core competencies in materials science and surface chemistry, BASF's BoroCat[®] offers excellent performance and flexibility for refiners requiring maximum conversion from a higher nickel resid feed.

Technology

BoroCat is the first catalyst offering from our novel technology platform **BBT** (**B**oron **B**ased **T**echnology). BBT uses the chemistry of boron to provide maximum metals passivation for significantly lower hydrogen and coke yields.

BASF's **BoroCat** combines the novel use of boron with high zeolite content and optimized porosity. The porosity is tailored to provide reduced mass transfer limitation, leading to more effective zeolite utilization and less over cracking to coke and gas with severe resid feeds.

The result is a catalyst for resid feed applications that has high tolerance to metals for the lowest hydrogen and coke yields. **BoroCat** gives high conversion, high gasoline and LCO (Light Cycle Oil) yields, and minimum bottoms yield.

Applications

BoroCat is optimal for high conversion, resid feed applications:

- FCC units wanting lower hydrogen and coke yields
- FCC units processing heavy resid feedstock with high metals contamination, specifically nickel
- FCC units desiring high conversion for improved liquid yields of LPG, gasoline and LCO

Typical properties*

Chemical Composition

Al ₂ O ₃ , wt%	37-45
Na ₂ O, wt%	0.20-0.35
Surface Area, m ² /g	250-350

Density

ABD, g/cm ³	0.65-0.80
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Particle Size

APS, μm	75-85
0-40, %	6-15

* 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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