

# HDXtra<sup>®</sup>

## Fluid Catalytic Cracking (FCC) Catalyst for maximizing Light Cycle Oil (LCO) yield

**HDXtra<sup>®</sup> is a premium FCC catalyst that helps refiners meet demand for diesel from their Vacuum Gas Oil (VGO) FCC units.**

### Technology

Based on our technology platform **Prox-SMZ** (Proximal **S**table **M**atrix and **Z**eolite), BASF's HDXtra catalyst combines the best attributes of both traditional high-zeolite and high-matrix catalysts by offering high matrix activity with good coke selectivity.

**HDXtra** helps refiners increase diesel yields by maximizing the production of light cycle oil (LCO) from the FCC unit. The LCO can be blended or further upgraded to augment the refiner's production of high-quality diesel fuel. This technology, combined with optimized operating conditions, enables refiners to boost LCO yield up to 5 volume percent.

### Applications

**HDXtra** is ideally suited for distillate maximization from Vacuum Gas Oil (VGO) feeds.

Refiners using **HDXtra** also enjoy these benefits:

- Increased LCO yields while maintaining excellent bottoms conversion
- Moderate zeolite activity to better control the amount of LCO converted to gasoline
- High matrix surface area (MSA) and matrix stability to maximize bottoms conversion
- Lowest catalyst Na levels in the industry to enhance stability
- Low hydrogen transfer for minimum cetane penalty

### Typical Properties\*

#### Chemical Composition

Al <sub>2</sub> O <sub>3</sub> , wt%	40-55
Na <sub>2</sub> O, wt%	0.1-0.3
Surface Area, m <sup>2</sup> /g	200-300

#### Density

ABD, g/cm <sup>3</sup>	0.65-0.85
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#### Particle Size

APS, μm	75
0-40, %	12

\* Properties can be customized to individual refiners' needs. These are the typical ranges that can be achieved.

## 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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