

HDXtra[®]

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

HDXtra[®] 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 Stable Matrix and Zeolite), 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 ₂ O ₃ , wt%	40-55
Na ₂ O, wt%	0.1-0.3
Surface Area, m ² /g	200-300

Density

ABD, g/cm ³	0.65-0.85
------------------------	-----------

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

Americas

BASF Corporation
25 Middlesex/Essex Turnpike
Iselin, New Jersey, 08830, USA

Asia Pacific

BASF South East Asia Pte Ltd
7 Temasek Boulevard
#35-01 Suntec Tower One
Singapore 038987

Europe, Middle East, Africa

BASF SE
67056 Ludwigshafen, Germany

Global Email

refining-catalysts@basf.com

Although all statements and information in this publication are believed to be accurate and reliable, they are presented gratis and for guidance only, and risks and liability for results obtained by use of the products or application of the suggestions described are assumed by the user. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH. Statements or suggestions concerning possible use of the products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that toxicity data and safety measures are indicated or that other measures may not be required. © 2015 BASF

www.catalysts.basf.com/refining

BF-10477 Rev. 04/21