



The Chemical Company

Product Data Sheet

NaphthaMax[®] II

Premier Fluid Catalytic Cracking (FCC) catalyst for short contact time applications

BASF Catalysts proudly introduces a new standard in gas oil FCC catalysts — NaphthaMax II.

Technology

Based on our award-winning and commercially proven Distributed Matrix Structures (DMS) technology platform, NaphthaMax II is designed to provide optimized diffusion of feed molecules to reaction sites that are located on the external, exposed surface of highly dispersed zeolite crystals.

NaphthaMax II's pore architecture is unique and is optimized to reduce mass transfer limitations in the FCC riser. This results in improved selectivities, and minimizes secondary reactions to less valuable products.

BASF Catalysts' proprietary Pyrochem Plus zeolite technology is the enabling factor in achieving the high activity required for short contact time FCC applications.

The optimized porosity of the DMS technology platform allows more effective zeolite utilization, and less overcracking to coke and gas. This allows high bottoms conversion with low coke, and higher yields of valued gasoline and light olefin products.

Applications

NaphthaMax II is ideally suited for use in the following situations:

- Units configured with advanced short contact time riser termination designs allowing the benefits of high activity catalysts to be realized

- Units requiring the highest degree of coke selectivity for optimum operation
- Units operating at or near air blower and/or wet gas limitations seeking additional means to increase unit profitability
- Units at or near circulation limits seeking additional means to increase unit profitability
- Units processing a high degree of coker based feedstocks at low to moderate metals levels (< 4000 ppm nickel and vanadium)
- Units processing highly hydrotreated gas oil feedstocks

Typical Properties*

Chemical Composition

Al ₂ O ₃ , wt. %	37–43
Na ₂ O, wt. %	0.17–0.29
ReO, wt %	0.7–5.0
Surface area m ² /g	250–350

Density

ABD, g/cm ³	0.68–0.85
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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 BASF

BASF Catalysts is the Global Leader in Catalysis, and is part of BASF - The Chemical Company. By leveraging our industry-leading R&D platforms, BASF's global research infrastructure and our passionate pursuit of innovation, we develop unique, proprietary technologies that drive customer success. Our catalytic solutions cover a wide range from chemical and refinery processes, to adsorbents and mobile emissions. In addition, we offer broad experience in trading base and precious metals.

BASF - The Chemical Company

BASF Catalysts Headquarters

BASF Catalysts LLC
25 Middlesex/Essex Turnpike
P.O. Box 770
Iselin, NJ 08830-0770
Tel: +1-732-205-7188
Fax: +1-732-205-7725
Email: refining-catalysts@basf.com

Asia Sales Office

BASF South East Asia Pte Ltd
7 Temasek Boulevard
#35-01 Suntec Tower One
Singapore 038987
Tel: +65-6337-0330
Fax: +65-6398-5104
Email: refining-catalysts@basf.com

Europe, Middle East, Africa Sales Office

BASF plc
Earl Road, Cheadle Hulme
P.O. Box 4
Cheadle, CHESHIRE, SK8 6QG, UK
Tel: +44-(0)-161-488-5156
Fax: +44-(0)-161-485-5487
Email: refining-catalysts@basf.com

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