



The Chemical Company

Product Data Sheet

NaphthaMax[®]

Fluid Catalytic Cracking (FCC) catalyst for gas oil feedstock

BASF Catalysts proudly introduces NaphthaMax, an FCC catalyst designed for short contact time applications.

Technology

Based on our award-winning and commercially proven Distributed Matrix Structures (DMS) technology platform, NaphthaMax is designed to provide enhanced diffusion of feed molecules to pre-cracking sites that are located on the external, exposed surface of highly dispersed zeolite crystals. The feed pre-cracks on the zeolite itself, rather than on an active amorphous matrix material. This provides better selectivities and minimizes the secondary diffusion reactions to less valuable products.

Activity is achieved with BASF Catalysts' proprietary Pyrochem Plus zeolite technology.

The optimized porosity of the DMS technology platform reduces the mass transfer limitations present in all FCC operations, meaning 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 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 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 high degree of coker based feedstocks at low to moderate metals
- Units processing highly hydrotreated gas oil feedstocks

Typical Properties*

Chemical Composition

| | |
|--|-----------|
| Al ₂ O ₃ , wt. % | 36–42 |
| Na ₂ O, wt. % | 0.25–0.31 |
| REO, wt % | 1.0–5.0 |
| Surface area m ² /g | 250–350 |

Density

| | |
|------------------------|-----------|
| ABD, g/cm ³ | 0.68–0.87 |
|------------------------|-----------|

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

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