

# Aegis®

## Fluid Catalytic Cracking (FCC) Catalyst for maximum liquid fuel yields from heavy feeds

**Aegis® is a flexible FCC catalyst that delivers outstanding coke-selective bottoms cracking from the heaviest feeds.**

### Technology

**Aegis**, based on two of BASF's industry-leading technology platforms, allows refiners to adjust the zeolite-to matrix ratio to calibrate yield selectivity, with superb metals tolerance and bottoms upgrading capabilities.

The optimized porosity of BASF's Distributed Matrix Structures™ (DMS) technology provides Aegis with the ability to reduce the mass transfer limitations present in all FCC operations, translating to more effective zeolite utilization and less over-cracking to coke.

The intimate dispersion of matrix and zeolite achieved through BASF's Prox-SMZ (Proximal Stable Matrix and Zeolite) technology provides Aegis with extremely high surface area stability even when operating with highly metal-contaminated feedstocks.

### Applications

Aegis is specifically formulated to address current market conditions, where refiners need a high degree of flexibility to maximize gasoline and light cycle oil (LCO) yields from the FCC unit, often under short notice.

Aegis is ideally suited for use in the following situations:

- Refiners desiring high yields of transportation fuels from their FCC units
- Units processing resid feedstock of varying severity
- Units requiring deep bottoms conversion
- Refiners desiring flexibility to vary yields between gasoline and distillate
- Units with severe metal contamination concerns
- Units requiring the highest degree of coke selectivity for optimum operations

### Typical Properties\*

#### Chemical Composition

Al <sub>2</sub> O <sub>3</sub> , wt%	36-48
Na <sub>2</sub> O, wt%	0.21-0.35
Surface Area, m <sup>2</sup> /g	230-330

#### Density

ABD, g.cm <sup>-3</sup>	0.68-0.88
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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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