

## **Product Data Sheet**

# Fortress™ NXT

# Fluid Catalytic Cracking (FCC) catalyst for heavy resid feedstock applications

BASF's Fortress NXT delivers superior metals passivation and increases liquid product yields

### **Premium Technology**

Fortress NXT is the next generation of Fortress catalyst resulting from research to optimize the efficacy of specialty alumina for nickel trapping applications.

BASF uses a proprietary specialty alumina to provide superior nickel trap performance using an optimized crystallite size and dispersion for more effective nickel trapping.

This technology synthesizes Fortress NXT in one step, resulting in a more environmentally friendly manufacturing process when compared with Fortress catalyst. This is in line with BASF's commitment to creating chemistry for a sustainable future.

Fortress NXT delivers enhanced activity maintenance and offers reduced hydrogen and coke yields at similar metals content.

#### **Applications**

Fortress NXT is customized for each FCC unit to deliver superior metals passivation and increased gasoline and light cycle oil (LCO) yields compared with competitor resid-FCC catalysts. Fortress NXT can be optimal for:

- FCC units requiring metals passivation for lower hydrogen and coke yields
- FCC units that need improved gasoline and LCO yields
- FCC units processing heavy residence feedstocks
- FCC units with total metals (Ni+V) >5,000 ppm on equilibrium catalyst

#### **Packaging**

- 1 ton super sacks
- Bulk (greater than 20 tons)

| Typical Properties*                  |           |
|--------------------------------------|-----------|
| Chemical Composition                 |           |
| Al <sub>2</sub> O <sub>3</sub> , wt% | 37-45     |
| Na <sub>2</sub> O, wt%               | 0.25-0.40 |
| Surface Area                         |           |
| TSA, m <sup>2</sup> /g               | 225-330   |
| Density                              |           |
| ABD, g cm <sup>-3</sup>              | 0.70-0.85 |
| Particle size                        |           |
| APS, μm                              | 75-85     |

<sup>\*</sup> Properties can be customized to individual refiners' needs. These are the typical ranges.

#### **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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