



The Chemical Company

## Product Data Sheet

# Low NO<sub>x</sub> Promoter (LNP)

## Environmental Fluid Catalytic Cracking (FCC) additive for low NO<sub>x</sub> promotion

BASF Catalysts proudly introduces Low NO<sub>x</sub> Promoter (LNP) for the catalytic oxidation of CO to CO<sub>2</sub> in an FCC regenerator at low NO<sub>x</sub> emission.

### Premium Technology

LNP provides catalytic oxidation of CO to CO<sub>2</sub> at minimum NO<sub>x</sub> emissions. The more complete oxidation of CO to CO<sub>2</sub> in the FCC regenerator dense phase significantly reduces afterburn-uncontrolled oxidation of CO to CO<sub>2</sub> in the dilute phase. In addition to afterburn control, the NO<sub>x</sub> produced is significantly reduced compared to platinum-based CO promoters by up to 70 percent.

### Maximum Results by Design

LNP has been developed using knowledge derived from BASF's automotive catalyst business. This knowledge of materials and NO<sub>x</sub> chemistry is the result of many years of research and development. BASF Catalysts' design and manufacturing expertise provides LNP with the chemical and physical stability required for effective CO oxidation at reduced NO<sub>x</sub> emissions combined with a long half life.

### Combining the Benefits

Maximum NO<sub>x</sub> reduction from an FCC regenerator off-gas can be achieved by utilizing both LNP and BASF Catalysts' CLEANOx<sup>®</sup> Low NO<sub>x</sub> Additive. CLEANOx removes NO<sub>x</sub> in the FCC regenerator by converting it to nitrogen. In combination with the catalytic NO<sub>x</sub> reduction by CLEANOx, LNP will reduce NO<sub>x</sub> production to achieve extremely low NO<sub>x</sub> emissions from the FCC regenerator.

### Packaging

- 2, 5, or 10 lb bags in pails or drums
- 40 lb pails
- 55 gallon drums
- 1 ton super sacks
- 1 ton tote bins

### Typical Properties

#### Density

ABD, g/cm <sup>3</sup>	1.2
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#### Particle Size\*

APS, μm	75
0-40, %	8

\*Particle size distribution is customized to optimize performance depending on individual FCC unit requirements.

## 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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