

# USP™

## Fluid Catalytic Cracking (FCC) additive for CO combustion promotion

**BASF's USP CO Promoter catalyzes oxidation of CO to CO<sub>2</sub> in an FCC regenerator. The USP promoted CO oxidation takes place in the dense phase in the regenerator and hence allows control of the CO content of the off-gas, as well as controlling the thermal CO afterburn in the dilute phase.**

### Premium Technology

USP allows more efficient oxygen utilization in the dense phase of the regenerator increasing the oxidation of CO to CO<sub>2</sub> and reducing the CO available in the dilute phase. The oxidation of CO to CO<sub>2</sub> in the dilute phase, afterburn, can lead to localized high temperatures and mechanical damage. USP use reduces CO emissions and controls afterburn.

### Maximum Results by Design

USP is designed and manufactured to provide a long active lifetime through the stability of the support and the dispersion of the platinum on the additive particles.

### Combining the Benefits

Additional benefits are achieved by matching USP with BASF's Distributed Matrix Structures™ (DMS)-based FCC catalysts. The high activity of our DMS-based FCC catalysts diminishes or eliminates the reduced overall activity that is caused by the dilution effect of additives addition to FCC catalysts from other suppliers.

### 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

### Target Properties

#### Chemical Composition

Platinum, wppm	500-800
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#### Density

ABD, g cm-3	1.0
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#### Particle size\*

APS, μm	76
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0-40, %	6
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## 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**

### Americas

BASF Corporation  
25 Middlesex/Essex Turnpike  
Iselin, New Jersey, 08830, USA

### Asia Pacific

BASF South East Asia Pte Ltd  
7 Temasek Boulevard  
#35-01 Suntec Tower One  
Singapore 038987

### Europe, Middle East, Africa

BASF SE  
67056 Ludwigshafen, Germany

### Global Email

[refining-catalysts@basf.com](mailto:refining-catalysts@basf.com)

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