

# **NOxCat™ ZNX SCR Catalyst**

# For natural gas turbines and stationary engines

Over a decade of research and development has resulted in the formulation of the BASF ZNX catalyst.

ZNX catalysts use zeolites as the principle catalytic material. The technology for these catalysts is based upon BASF's world-leading experience and expertise with zeolite catalysts.

ZNX catalysts feature composite honeycomb configurations which use highly active zeolite catalytic coatings to improve on ceramic structures. ZNX catalysts do not contain heavy metals, eliminating disposal concerns.



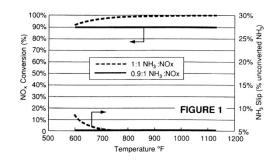
- Zeolite catalyst materials
- Does not contain heavy metals

## **Temperature Range**

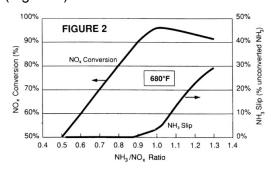
- 675 to 1075°F optimum
- 600 to 1125°F maximum
- Under 600°F, NOx efficiency is reduced with increased NH<sub>3</sub> slip

#### **Performance**

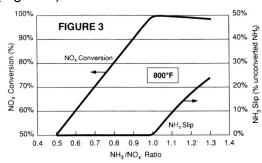
NH<sub>3</sub> reacts with NOx to form nitrogen and water. NOx conversion increases with NH<sub>3</sub> injection. With 0.9:1.0 NH<sub>3</sub>:NOx ratio 90% NOx conversion and low NH<sub>3</sub> slip from 600 to 1125°F (Figure 1)



At 680°F, NOx conversion up to nearly 90% can be achieved with low NH<sub>3</sub> slip (Figure 2)



 At 800°F, NOx conversion up to nearly 100% can be achieved with low NH<sub>3</sub> slip (Figure 3)



### **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 Tel: +1-732-205-6078 Email: sandra.king@basf.com

#### **Asia Pacific**

BASF (China) Company Limited 239 Luqiao Road, Pudong Shanghai 201206, China Tel: +86-21-6109 1862 Email: daniel.a.zhu@basf.com

Europe, Middle East, Africa BASF SE 67056 Ludwigshafen Germany Tel: +49-621-60-59742

Email: adrian.crosman@basf.com

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