

# VOCat™ 300H

## Oxidation catalyst

**When compared to conventional catalysts, VOCat 300H provides higher activity, excellent stability and outstanding selectivity.**

Wider application of catalysts to the oxidation of volatile organic compounds (VOCs) has placed new requirements on catalysts. Some of these requirements are oxidation of VOCs at lower temperatures and oxidation of gas streams with more and varied VOCs.

### Activity

VOCat 300H shows significantly higher activity (Chart 1) when compared to standard activity catalysts such as VOCat 300S. This results in either lower fuel use by reducing operating temperature requirements, or lower catalyst volumes to attain the same performance requirements.

VOCat 300H is active over a wide range of temperatures and organic compounds, and increases when going from aliphatic to aromatic compounds.

### Selectivity

It is important that complete oxidation occur and secondary products are not produced. VOCat 300H is a highly selective catalyst and provides complete oxidation when operated according to the defined parameters.

### Stability

Durability studies conducted over thousands of hours, and field commercial data show VOCat 300H to be extremely stable.

It can often be regenerated by either chemical or thermal treatment. This makes it especially suited for use in the most demanding applications.

### Typical Process Applications

The high activity of VOCat 300H makes it especially well suited as a low light off temperature catalyst in oxidation of the exhaust of bakery ovens. Additionally, in a number of chemical processes such as maleic anhydride, formaldehyde and purified terephthalic acid (PTA), the activity of VOCat 300H makes it an excellent catalyst choice. An example of the performance of VOCat 300H treating a gas stream from a PTA exhaust is shown in Chart 2.

### Features and Benefits

BASF catalysts are supported on ceramic or metallic substrates and feature:

- Excellent adhesion of catalyst coating to the substrate
- High temperature stability and thermal shock resistance
- Low pressure drop
- High strength & excellent durability
- Compact design

### Typical Operating Specs

- Temperature range: 130°C to 600°C
- Cell Geometry: 100 to 400 cpsi
- Performance: up to 99+%

## 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.

Visit [www.catalysts.basf.com/patents](http://www.catalysts.basf.com/patents) for a list of our product patents.

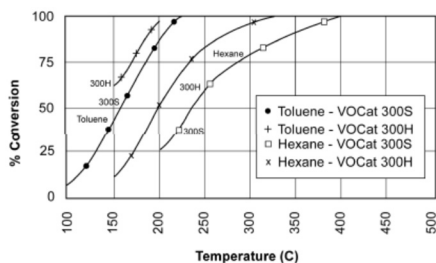


Chart 1

VOCat 300H Has Higher Conversion Efficiency Than Standard Catalysts

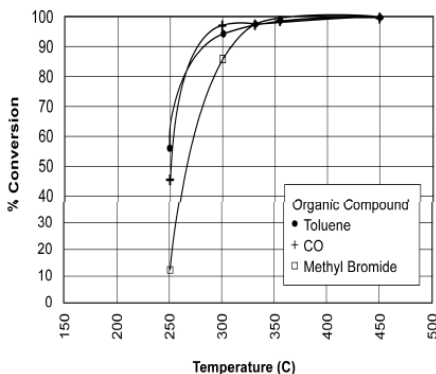


Chart 2

VOCat 300H Provides Excellent Activity For Oxidizing VOC, CO and Methyl Bromide

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