



BASF introduces new sulphuric acid catalyst

- Unique shape leads to 30 percent greater catalytic surface area
- New sulphuric acid catalyst O4-115 Quattro in operation at first reference plant already for one year
- Proven performance improvement for sulphuric acid producers

BASF has introduced the new sulphuric acid catalyst O4-115 Quattro into the market. The new, cesium-based catalyst is unique due to its geometrical shape – a combination of four strands – leading to a 30 percent greater catalytic surface area compared to conventional sulphuric acid catalysts. For sulphuric acid producers, this translates into higher conversion in the catalyst bed, reduction of SO₂ emissions, and improved performance in plants with limited catalyst volumes. Additionally, the O4-115 Quattro features enhanced physical and mechanical properties. Due to its improved catalyst hardness, which is reflected in a lower sieving loss, this new catalyst offers long-term stability and cost-efficient operation.

A reference plant operated by Domo Caproleuna GmbH has been using the new sulphuric acid catalyst O4-115 Quattro since 2016. With the new catalyst, the plant has seen an increase of the SO₂ conversion and a simultaneous capacity increase. Ulf Müller, Domo Caproleuna's plant manager, is pleased with the BASF Quattro catalyst performance: "The right catalyst is a crucial factor for successfully operating a sulphuric acid production plant. Since we have been using the O4-115 Quattro catalyst, we are able to operate our plant in a much more efficient way."

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BASF is one of the leading manufacturers of sulphuric acid catalysts worldwide, leveraging its own sulphuric acid production expertise. The company operates four sulphuric acid plants at its headquarters in Ludwigshafen, Germany where the latest catalyst technologies are used.

"For the new development of catalysts, in-house sulphuric acid production is a huge advantage because we can gain important insights on the performance and long-term stability of the catalysts, and our customers can directly benefit from these findings," said Detlef Ruff, Senior Vice President, BASF Process Catalysts. "In addition, we are continuously investing in sulphuric acid catalyst research to help our customers be even more successful. In 2016, we launched a new catalyst test facility, and the sulphuric acid catalyst O4-115 Quattro is the first of many new developments that will emerge from it."

About BASF's Catalysts Division

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. Further information on BASF's Catalysts division is available on the Internet at http://www.catalysts.basf.com.

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