

## **News Release**

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BASF introduces Valor™ fluid catalytic cracking (FCC) catalyst technology to enhance FCC catalyst performance

- Delivers superior metals passivation and activity maintenance
- Minimizes hydrogen and coke production

BASF announces the launch of Valor<sup>™</sup>, a next generation Fluid Catalytic Cracking (FCC) catalyst technology designed to enhance the performance of FCC catalysts processing heavy residuum (resid) oil feedstock. Valor<sup>™</sup> is BASF's latest innovation in metals passivation. It leads to superior catalyst activity maintenance and enables refinery profit maximization and increased sustainability of operations through higher and prolonged catalyst efficacy.

The ever-increasing number of refineries processing feedstock with high amounts of metal contaminants requires an FCC catalyst technology which effectively passivates these metal contaminants to mitigate their detrimental effect on unit operation. Valor™ addresses this important market need by effectively passivating Vanadium, thereby alleviating its destructive effects on FCC catalyst performance.

Refineries that used Valor™ technology in their FCC units achieved improved catalyst activity retention with lower hydrogen and coke yields.

"Valor's effectiveness has been demonstrated by its quick commercial adoption by multiple users globally. The introduction of our innovative Valor technology underscores our commitment to making our refining customers worldwide more successful," says Detlef Ruff, Senior Vice President Process Catalysts at BASF.

"Being able to process opportunity crudes is a critical competitive advantage in refining industry. As the resulting resid-feeds bring elevated levels of contaminants Page 2 P389/18e

to FCC units, effective mitigation strategies are needed," added Jim Chirumbole, Vice President Refining Catalysts at BASF. "Catalysts with our new Valor technology achieve efficient passivation of Vanadium with increased tolerance against Sulfur, effectively enabling refiners to increase resid processing without sacrificing conversion or product yields."

## **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 <a href="https://www.catalysts.basf.com">www.catalysts.basf.com</a>.

## **About BASF**

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The more than 115,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into four segments: Chemicals, Performance Products, Functional Materials & Solutions and Agricultural Solutions. BASF generated sales of more than €60 billion in 2017. BASF shares are traded on the stock exchanges in Frankfurt (BAS), London (BFA) and Zurich (BAS). Further information at www.basf.com.