

News Release

P328/21e
September 27, 2021

BASF announces highly efficient and sustainable product innovations in its chemical catalysts portfolio

- **Introduction of more efficient catalysts for isopropyl alcohol producers**
- **New catalyst increasing efficiency in biodegradable PBAT value chain**
- **Launch of sustainable lightweight Selective Hydrogenation Catalysts**

BASF introduces a range of new catalysts which will be presented during the upcoming European Petrochemical Associations Conference (EPCA) in a series of webinars. The new offer includes catalysts to produce isopropyl alcohol (IPA) more efficiently, a crucial ingredient in hand sanitizers, a much-needed consumer product during the Covid-19 pandemic. BASF's high performance oxo alcohol catalyst Ni 3354 E combines high activity with exceptionally high selectivity. The catalyst has been tested and qualified to produce IPA through hydrogenation of acetone. Ni 3354 E allows IPA producers to operate at high throughput rates and temperatures without a drop in selectivity thus increasing productivity.

BASF also qualified chromium-free copper extrudate catalysts as Cu 0560 E to further broaden its hydrogenation catalyst offering, enabling IPA producers to select the most suitable product solution for process requirements.

New catalyst O4-204 increasing efficiency in biodegradable PBAT value chain

Additionally, BASF introduced O4-204, a new catalyst for n-butane based maleic anhydride production. Compared to previous product generations, O4-204 offers highest selectivity towards maleic anhydride while allowing a longer catalyst on-

stream time, which makes the process more cost-effective. The product benefits have already been demonstrated in commercial use. The market for maleic anhydride is strongly growing in China driven by an increasing demand for polybutylene adipate terephthalate (PBAT), which is used predominantly as biodegradable packaging material.

BASF starts new production line for lightweight selective hydrogenation catalysts

BASF will launch the next generation of its selective hydrogenation catalysts by the end of 2021. Through an innovative lightweight alumina support, the amount of catalyst required for processing unsaturated C₃-, C₄- and PYGAS streams can be reduced by up to 40% giving steam crackers and refineries the chance to enhance their efficiency and counterbalance increasing palladium market prices during their next refill. As intensive pilot scale tests confirm, precious metal expenses can be improved by 25% in many hydrogenation units. These new E 15x light catalysts complete BASF's selective hydrogenation portfolio with the well-established E 15x series and the recently launched sulfur resistant E 15x S, being installed in two world-scale units in the upcoming months.

“Our recent innovations support BASF's strategy to help our customers to be more successful by emphasizing our commitment to provide sustainable and efficient solutions,” says Dr. Detlef Ruff, Senior Vice President, Process Catalysts, at BASF.

“We are looking forward to virtually meet with our customers during the upcoming EPCA from October 5-7,” says Dr. Sascha Vukojevic, Director Sales, Chemical Catalysts & Adsorbents EMEA. “We are happy to offer various webinars addressing the latest innovations that can be found on our dedicated website <https://catalysts.basf.com/epca>.”

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 www.catalysts.basf.com.

About BASF

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. More than 110,000 employees in the BASF Group contribute to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €59 billion in 2020. BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts (BASFY) in the U.S. Further information at www.basf.com.