

## Press Release

Essen, May 26, 2023

### **Brenntag Specialties Pharma provides new tailor-made service that creates sustainable enzyme stability for bio-catalysis**

Brenntag, the global market leader in chemicals and ingredients distribution, offers an innovative service for the protection and improvement of the performance of enzymes that are used in biocatalysis. This process is used to initiate, accelerate or control chemical reactions, for example in the production of drugs such as insulin.

Until now, the use of enzymes in the pharmaceutical industry has been limited because the structures are delicate, fragile and often not well suited to the conditions of the process. In order to exploit the full potential of enzymes, Brenntag's partner INOFEA has developed the enzen® technology, which is based on a protective layer that increases the stability of immobilized enzymes. In contrast to other available technologies, the innovation is the shielding of sensitive enzymes. As a result, the enzymes can perform the reaction under difficult conditions because they are less sensitive to fluctuations in pH or temperature. This sustainable technology improves the stability of the enzymes and allows them to be recycled and easily recovered in the production steps. In each application, reactivity remains sufficiently high over several production cycles. In this way, the new service enables efficiency and reusability.

#### **Tailor-made solution for pharmaceutical industry**

The solution is also suitable for customers' own enzymes, tailoring the application of enzen® and even enabling scale-up options for the enzyme itself if required. The solution provides the desired enzyme, immobilizes and protects it, and measures various endpoints such as immobilization yield and enzyme activity after immobilization and protection. Brenntag offers the use of the technology under a license agreement or supplies the enzen® enzyme on a turnkey basis in industrial quantities. "The special thing about this solution is that it is tailor-made. We can respond very specifically to the needs of our customers," says Joakim Volke, President Pharma EMEA. "It's about developing a customized service according to the customer's needs, not an off-the-shelf product."

#### **New service reduces the amount of harmful waste and energy costs**

Enzymes gain a wider range of substrates and achieve exceptional reactivity by increasing reaction rate and selectivity. With the enzen® technology, fewer raw materials for synthesis are needed and energy costs are reduced because the production process uses lower temperatures than conventional catalysis. Customers benefit from reduced waste and solvent use in biocatalytic processes, as well as reduced hazardous waste, because the innovative enzen® technology enables the elimination of metals as biocatalysts.

[Landing page INOFEA](#)

[Video INOFEA](#)

### **About Brenntag:**

Brenntag is the global market leader in chemicals and ingredients distribution. The company holds a central role in connecting customers and suppliers of the chemical industry. Headquartered in Essen, Germany, Brenntag has more than 17,500 employees worldwide and operates a network of about 600 sites in 72 countries. In 2022, Brenntag generated sales of around 19.4 billion EUR. The two global divisions, Brenntag Essentials and Brenntag Specialties, provide a full-line portfolio of industrial and specialty chemicals and ingredients as well as tailor-made application, marketing and supply chain solutions, technical and formulation support, comprehensive regulatory know-how, and digital solutions for a wide range of industries. In the field of sustainability, Brenntag pursues specific goals and is committed to sustainable solutions in its own sector and the industries served. Brenntag shares have been listed at the Frankfurt Stock Exchange since 2010, in the DAX since September 2021. In addition, the Brenntag SE shares are listed in the DAX 50 ESG and DAX ESG Target. For more information, visit [www.brenntag.com](http://www.brenntag.com).

### **About INOFEA:**

INOFEA, a biotech enterprise founded in Switzerland in 2014, is an enzyme-performance-improving company enabling sustainable manufacturing processes going hand in hand with reduction of waste, pollution, and material consumption. INOFEA unfolds the potential of enzymes in biocatalysis and medical applications. The offerings include, among other activities, customized development of enzymes with superior properties focusing on the growing importance of defossilization in Life-Science industries. INOFEA enables the industry to make production of APIs economically and environmentally more sustainable, by reducing the number of intermediates versus chemical synthesis resulting in less waste, energy consumption and purification steps. The company has supply and licensing agreements in place and invests further into biocatalysis enabling customers reaching their ambitious sustainability goals.

#### **Press contact:**

Helmut Weintögl

Brenntag SE

Director Communications EMEA

Telephone: +49 (201) 6496-1339

Robert Reitze

Brenntag SE

Global Communications

Telephone: +49 (201) 6496-2128

E-Mail: [communications.emea@brenntag.com](mailto:communications.emea@brenntag.com)

[www.brenntag.com](http://www.brenntag.com)