

DAI Industrial Enzymes

DAI Industrial Enzymes is a leading producer of Industrial Enzymes, including amidases, aldolases and nitrilases. DAI Industrial Enzymes is part of DSM Anti-Infectives* and is based in Delft, the Netherlands. In close cooperation with several DSM business groups, DAI Industrial Enzymes has built up 10 years of valuable knowledge and experience on the production and application of specialty enzymes for the *pharmaceutical, fine chemical and vitamin* markets. This has resulted in DAI Industrial Enzymes gaining proficiency in developing and implementing new specialty enzymes within short and well predictable lead-times, produced according to cGMP guidelines and offered at competitive prices.



The expertise of DAI Industrial Enzymes is built on three main strengths:

Highly innovative and efficient R&D and manufacturing

Short and well predictable lead-times

Strong product knowledge

Highly innovative and efficient R&D and manufacturing

The success of DAI Industrial Enzymes is based on the combined effort of both a highly innovative R&D organization and a highly efficient production facility. DAI Industrial Enzymes offers both a standardized program and tailor-made solutions:

Standardized program

Our standard program consists of both our unique Plugbug™ concept and a standard production protocol, which consists of fermentation, downstream processing and formulation. The standard production protocol ensures our customers short and well predictable lead-times for the development and implementation of the required enzyme.

Tailor-made solutions

If a new Industrial Enzyme cannot be produced via our standardized program we can offer tailor-made solutions in order to develop a production process for an enzyme that exactly fits your application.

Plugbug™

The Plugbug™ concept is a standardized program exploiting established processes for the production of enzymes. The Plugbug™ concept contains:

- *Molecular biological tools*, available to quickly transfer new genes into the production strain
- *A robust strain* that can attain high productivity levels
- *A scalable and well-known fermentation process*

Solutions offered by DAI Industrial Enzymes:

Duplicate existing enzyme

Supply enzyme at competitive prices and safeguard your future supplies.

Improve existing enzyme

Develop and produce second-generation (intrinsically improved) enzyme.
Provide immobilized enzyme to reduce enzyme costs and prevent contamination of the product stream.
Develop improved product formulation suitable for your application.

Develop new enzyme

Facilitate research and development of an enzyme and of the process based on an enzyme.
Development of a process for the production of a new enzyme.

* DSM Anti-Infectives possesses a leading position in the global anti-infectives market. It has developed unique enzymatic routes to produce its DSMPureActives™ (Active Pharmaceutical Ingredients) formerly produced via chemical routes. Having green production processes will contribute to environmental friendliness, formulation efficiency and patient wellness.

