

Position on Industrial Biotechnology



Responsible use of biotechnology to improve life, today and tomorrow

Evonik is one of the world's leading specialty chemicals companies, going far beyond chemistry to create innovative, profitable and sustainable solutions for its customers to improve life, today and tomorrow.

In Evonik's Nutrition & Care division with its three business lines Health Care, Care Solutions and Animal Nutrition, everything revolves around human well-being – around health and the quality of life while caring for the planet.

Within Nutrition & Care, industrial biotechnology is an important lever for growth and innovation. Industrial biotechnology plays a key role in securing our quality of life, and will become even more important in the future by i) helping to reduce the consumption of natural resources, ii) driving the sustainability of the global food system, and iii) enabling the smooth transition to a circular bio-based economy.

As a science-based company, Evonik applies biotechnological methodologies to decipher the mode of action of our products and to foster the understanding of the targeted systems. We rely on industrial biotechnology for manufacturing biomolecules and bio-microbials such as highly soluble, ultra-pure collagen for use in pharmaceutical, medical, cell culture and tissue engineering markets, biosurfactants for household and cosmetic applications, omega-3 fatty acids from natural microalgae for animal nutrition, amino acids for "low protein diet" formulations as global feed standard, and probiotics to enable antibiotic free livestock farming.

Industrial biotechnology utilizes natural microorganisms such as bacteria, yeasts and algae to generate sustainable industrial products or processes. At Evonik, we use naturally occurring microorganisms, classically developed strains and genetically modified microorganisms. Our production microorganisms and our production processes are optimized by modern, powerful and safe biotech methods.

The innovative power of Nutrition & Care is based above all on our strength in biotechnology, in the understanding of our customers and value chains and the focus on sustainability.

Our manufacturing processes encompass both fermentation and bio-catalysis:

- Fermentation processes harness the full synthesis potential of microorganisms as a way of producing large quantities of the desired functional molecule.
- With fermentation we produce functional bacteria, cell lysates and supernatants.
- Biocatalytic processes utilize microorganisms that selectively produce specific enzymes. These enzymes are then either used as a whole cell biocatalyst or are isolated for use as a biocatalyst in manufacturing processes.

Evonik considers industrial biotechnology to be safe. All microbial strains undergo a thorough science-based safety assessment in Evonik's laboratories during the course of the necessary regulatory approval processes. For all our safety assessment(s) we adhere to all the latest scientific standards and regulations to prove the safety of our products for humans, animals and the environment.

We respect our customers' and the public's wishes for transparent practices, transparent communications, and consistent risk management. Safety and quality of our products as well as regulatory compliance are a matter of course for us as a leading specialty chemicals company.

Evonik is fully committed to the development of safe products and processes that meet or exceed all regulatory standards and sustainability targets.

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