

TV-Service – Seeing is believing

BASF in motion

tvservice.basf.com

White biotechnology at BASF – Ludwigshafen

White biotechnology is a key technology in BASF. It has the potential to manufacture products more efficiently than with conventional chemical processes. It is also useful for enabling completely new products not accessible using conventional synthesis approaches.

BASF uses the biotechnological methods of fermentation and biocatalysis in order to manufacture products such as vitamins, enzymes and chiral chemicals.

(01) From bio-based renewable raw materials to valuable chemicals

Industrial biotechnology is an interdisciplinary field with employees from the fields of biochemistry, bioinformatics, bioengineering and chemistry, among others.

(15.11.2022 / 5'24 / ATMO / Footage)



For further information:

Silke Buschulte-Ding, BASF SE
Specialist Visual Communication,
Film und TV, Brand Consultancy
Tel. 0049 621 60 48 387,
E-Mail: silke.buschulte-ding@basf.com



White biotechnology – also known as industrial biotechnology – uses microorganisms and enzymes to produce chemical and biochemical products.

The product portfolio of white biotechnology is manifold and comprises basic chemicals, monomers, and many specialty chemicals like vitamins, food and feed supplements, as well as pharmaceutical and agricultural intermediates. Industrial biotechnology is an interdisciplinary field with employees from the fields of biochemistry, bioinformatics, bioengineering and chemistry, among others. New products are often created in cooperation with various BASF operating divisions.

(02) From bio-based renewable raw materials to valuable chemicals

In bioinformatics, computer algorithms help to find data or patterns in biological data in order to make the right decisions about which experiments to perform next.

(15.11.2022 / 3'23 / ATMO / Footage)



White biotechnology – also known as industrial biotechnology – uses microorganisms and enzymes to produce chemical and biochemical products. The product portfolio of white biotechnology is manifold and comprises basic chemicals, monomers, and many specialty chemicals like vitamins, food and feed supplements, as well as pharmaceutical and agricultural intermediates. Biotechnological processes are often more efficient than classical chemical production and require less raw materials and energy. Usually, they are based on renewable raw material and exhibit a beneficial carbon footprint. Some products like enzymes or complicated actives are only accessible via white biotechnology and cannot be manufactured by chemical synthesis.

In bioinformatics, computer algorithms help to find data or patterns in biological data in order to make the right decisions about which experiments to perform next.

For further information:

Silke Buschulte-Ding, BASF SE
Specialist Visual Communication,
Film und TV, Brand Consultancy
Tel. 0049 621 60 48 387,
E-Mail: silke.buschulte-ding@basf.com



- (03) From bio-based renewable raw materials to valuable chemicals**
The microbes used in industrial biotechnology work like small, perfectly organized factories, producing valuable chemical products from raw materials such as sugars.
(15.11.2022 / 2'27 / ATMO / Footage)



White biotechnology – also known as industrial biotechnology – uses microorganisms and enzymes to produce chemical and biochemical products.

The product portfolio of white biotechnology is manifold and comprises basic chemicals, monomers, and many specialty chemicals like vitamins, food and feed supplements, as well as pharmaceutical and agricultural intermediates. The microbes used in industrial biotechnology work like small, perfectly organized factories, producing valuable chemical products from raw materials such as sugars.

For further information:

Silke Buschulte-Ding, BASF SE
Specialist Visual Communication,
Film und TV, Brand Consultancy
Tel. 0049 621 60 48 387,
E-Mail: silke.buschulte-ding@basf.com



(04) From bio-based renewable raw materials to valuable chemicals
BASF employees fill a fermenter in the technical center.
(15.11.2022 / 2'51 / ATMO / Footage)



White biotechnology – also known as industrial biotechnology – uses microorganisms and enzymes to produce chemical and biochemical products. The product portfolio of white biotechnology is manifold and comprises basic chemicals, monomers, and many specialty chemicals like vitamins, food and feed supplements, as well as pharmaceutical and agricultural intermediates. Biotechnological processes are often more efficient than classical chemical production and require less raw materials and energy. Usually, they are based on renew-able raw material and exhibit a beneficial carbon footprint. Some products like enzymes or complicated actives are only accessible via white biotechnology and cannot be manufactured by chemical synthesis.

Process development for new substances developed in the laboratory takes place in the Technikum in Ludwigshafen. The product volume is increased step by step. Fermenters with volumes ranging from 20 to 5000 liters are used.

For further information:

Silke Buschulte-Ding, BASF SE
Specialist Visual Communication,
Film und TV, Brand Consultancy
Tel. 0049 621 60 48 387,
E-Mail: silke.buschulte-ding@basf.com

