



LET'S GO FOR 100% RENEWABLE RESOURCES



A leading European company in the development and production of **bioplastics**

BIOTEC is a leading company that develops and produces sustainable bioplastics made from plant-based renewable resources. Flexible and rigid applications range from refuse and shopper bags to pharmaceutical capsules, including food industry blisters, cosmetics packaging and many other products manufactured and produced to order.

BIOTEC bioplastic resins are sold under the brand name of BIOPLAST. Products made from all BIOPLAST grades are fully biodegradable and compostable according to EN 13432.

In the fast-growing market of bioplastics, BIOTEC is a key player that offers credible and industry-scale biobased plastic solutions, with the objective of significantly reducing the use of fossil-based plastics.

A capacity of 30,000 tons p.a.

BIOTEC'S KNOW-HOW COVERS 3 AREAS OF EXPERTISE:

- Developing new formulations and being able to combine the physical properties of our components to reach specified properties.
- Compounding expertise: BIOPLAST specific properties not only depend on its composition, but significantly on the compounding technique used. BIOTEC has achieved outstanding proprietary know-how.
- Screw design: BIOTEC is able to design its own screw set-up in order to obtain new properties and has developed an exclusive pool of compounding units.

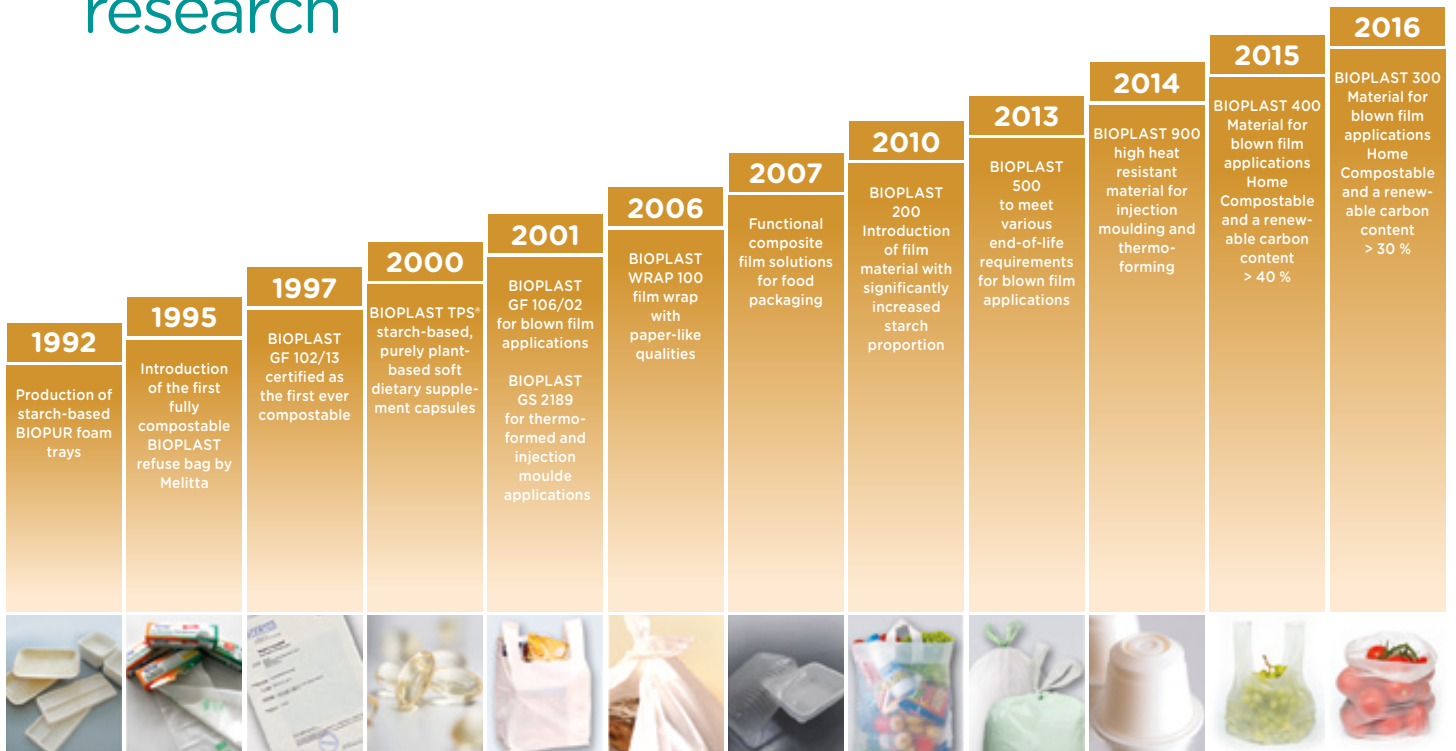


FOCUS ON RESEARCH

More than 30% of all personnel resources are working on research and development. BIOTEC has implemented a large-scale laboratory and product testing facility, together with converting units such as extruders.

Over the years, BIOTEC has registered more than 200 patents, both for material and processes, in all major markets worldwide.

Innovation-driven research



GMO-free / Plasticizer-free

BIOTEC'S MAJOR FIELDS OF INNOVATION ARE FOCUSED ON:

- Increasing the biobased contents of all compounds, and especially film applications
- Improving processability and resistance
- Improving mechanical and barrier properties

Enlarging the scope of bioplastic applications while meeting constantly growing demands from the industry calls for a strong commitment to innovation.

Thanks to a dedicated research team, BIOTEC is constantly improving BIOPLAST to provide a wide range of industrial sectors – cosmetics, food, agriculture, pharmaceuticals and more – with high-performance bioplastic solutions.

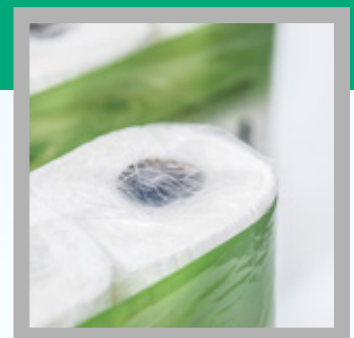
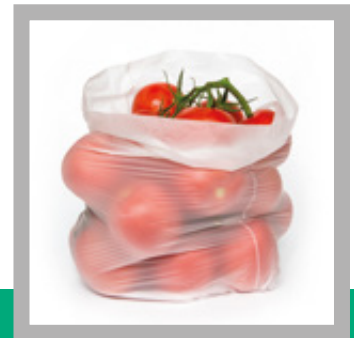


BIOPLAST®

BIOPLAST compounds are plant-based biodegradable bioplastic resins made from potato starch and other biologically sourced polymers.

BIOPLAST grades are designed to run on existing standard industrial equipment. They can be processed by extrusion plants manufacturing blown film, flat film, mouldings, profiles and injection moulded components to become fully biodegradable products.

Over and above film applications such as bags and wrapping products, BIOPLAST resins can be used to manufacture products for the catering/fast food industry, foods and pharmaceuticals, healthcare, agriculture or the automotive industry.



UP TO 100% BIOBASED

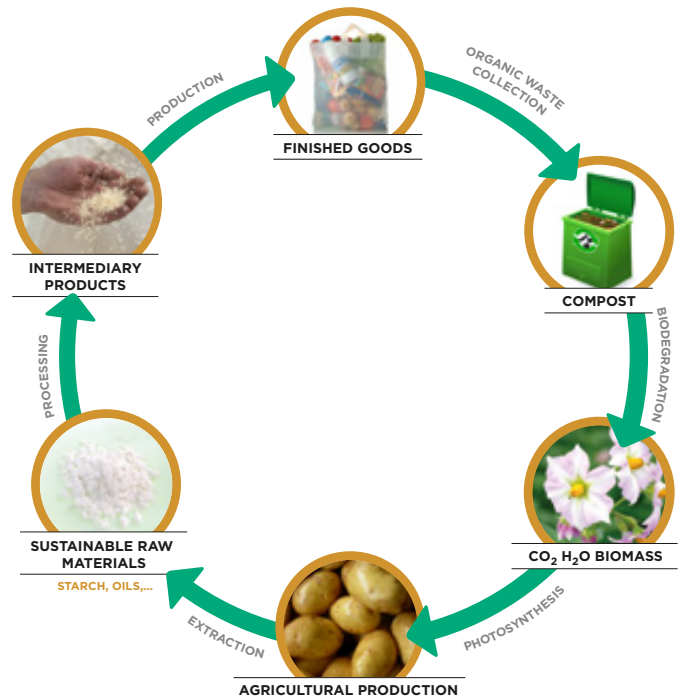
For the entire BIOPLAST range, the company strives to achieve the highest possible proportion of biobased raw materials. The spectrum of biobased proportions starts at 23% (BIOPLAST GF 106/02), rises to over 50% (BIOPLAST 500) and peaks at 69% (BIOPLAST GS 2189). Even the maximum proportion of 100% is available with BIOPLAST TPS® the finest example.



BIOPLAST, significantly environment friendly

BIOPLAST resins are a relevant answer to environmental issues. The use of renewable resources by industry effectively saves fossil resources and reduces the amount of greenhouse gas emissions.

With „OK compost“ certification, packaging made from BIOPLAST provides the most relevant end-of-life option in green waste collection systems.



30 to 70% CO₂ saving with



BIODEGRADABLE

According to standard EN 13432, bags or products made from BIOPLAST resins will biodegrade in less than 180 days.

COMPOSTABLE

In addition to conventional plastics, products made from BIOPLAST resins have the unique functionality of compostability. This is the preferred end-of-life option for all products made with BIOPLAST. They are all perfectly designed to disintegrate in industrial composting units in less than 90 days.

Some BIOPLAST resins are HOME COMPOSTABLE and can be disposed of in a well maintained domestic composting unit.



bioplastics*

RENEWABLE

According to standard ASTM D6866, BIOPLAST resins contain up to 100% of vegetal resources, mostly potato starch.

RECYCLABLE

Like conventional plastics, products made from BIOPLAST resins can be recycled with other plant-based biodegradable bioplastics.

It is also proven that 10% of recycled BIOPLAST in the recycling flow of oil-based PE does not harm the mechanical properties of a comparable blown film made of recycled PE.

INCINERABLE

Composting is the preferred end-of-life option, but while products made from BIOPLAST resins can be collected with general waste, they may also be incinerated and generate high calorific value.

PLASTICIZER-FREE

All BIOPLAST resins except BIOPLAST TPS® are plasticizer-free, so they not only meet consumer requirements but also provide excellent processing capacities.

* Life cycle analysis shows that biobased plastics lead to a reduction in CO₂ of between 30 and 70% compared with standard plastics, depending on the feedstock, the product and the application.

BIOPLAST MATERIALS FOR FLEXIBLE APPLICATIONS

BIOPLAST GF 106/02

- >20% biobased
- Plasticizer-free
- GMO-free



BIOPLAST 300

- >30% biobased
- Plasticizer-free
- GMO-free



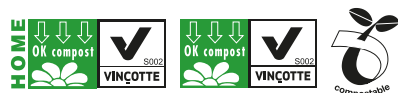
BIOPLAST 400

- >40% biobased
- Plasticizer-free
- GMO-free



BIOPLAST 500

- >50% biobased
- Plasticizer-free
- GMO-free



This brochure is printed on FSC certified paper.

