

WE MAKE BIOPLAST



**BIOPLAST**<sup>®</sup>  
200

-  Film application
-  30% biobased

# BIOPLAST<sup>®</sup> 200

BIOPLAST 200 is a plasticizer-free and GMO-free thermoplastic material that contains a high proportion of natural potato starch. It is suitable for processing by blown film extrusion to produce items that are completely biodegradable. The absence of plasticizer allows BIOPLAST 200 to be easily processed to manufacture stable products of consistent quality. The material has an excellent shelf life but will biodegrade readily in an industrial composting environment.

## PROPERTIES

Parameter	Target value	Unit	Test Method
Pellet size	3.0	mm	Caliper gauge
Density	1.32	g/cm <sup>3</sup>	EN ISO 1183-1/A
Bulk density	820	kg/m <sup>3</sup>	EN ISO 60
MFR (190°C, 5 kg)	1.9	g/10 min	EN ISO 1133
Moisture content	< 0.3	weight-%	BIOTEC test directive

## PROCESSING

BIOPLAST 200 was designed for use in blown film extrusion, but also can be processed in conventional equipment for sheet film extrusion and injection moulding.

For further processing information please refer to our specific "Configuration and Operating Guidelines".

## MECHANICAL PROPERTIES OF BLOWN FILM\* MADE OF BIOPLAST 200

Parameter	Typical value	Unit	Test Method
Tensile strength MD	24	MPa	EN ISO 527-3
Tensile strength TD	23	MPa	EN ISO 527-3
Elongation at break MD	350	%	EN ISO 527-3
Elongation at break TD	450	%	EN ISO 527-3
Specific impact resistance	8.5	g/μm	ASTM D 1709

(\*blow-up ratio: 3.5; die gap: 1.05 mm; die diameter: 60 mm; thickness: 25μm)

## FILMS MADE OF BIOPLAST 200

- are biodegradable according to EN 13432
- are recyclable
- are printable by flexographic and offset printing without pretreatment
- have a soft touch
- can be coloured with masterbatches
- are sealable (hot, RF, ultra sonic)
- can be drawn down to below 15 μm

## GENERAL APPLICATIONS

- short life packaging
- multi-use bags (e.g. carrier bags, loop-handle bags)
- single-use bags (e.g. refuse bags, bin liners)
- food packaging
- agricultural films

## SUSTAINABILITY

BIOPLAST 200 contains 42% of renewable raw material and has a biobased carbon share of 30% according to ASTM D6866.

## END OF LIFE OPTIONS

BIOPLAST 200 is compostable, recyclable and can be incinerated.

## COMPOSTABILITY

Products made of BIOPLAST 200 are completely biodegradable and, depending on their thickness, compostable. The material is certified and registered by Vinçotte according to EN 13432 awarding the "OK compost" and "seedling" logo.



## 🌱 Film application

## 🌱 30% biobased

For further information regarding biodegradability and compostability of BIOPLAST materials please refer to our product information "Biodegradability and Compostability".

Although it is biodegradable, the material should only be disposed of in a controlled waste management environment.

### FOOD PACKAGING

BIOPLAST 200 is mainly designed for packaging dry and/or fatty food. All raw materials used for BIOPLAST 200 are listed in directive EU 10/2011. For additional food packaging options and further information, please refer to our product information "Suitability of BIOPLAST Products for Food Contact".

### DELIVERY FORMAT

BIOPLAST 200 is available in Telescope-Octabins (with PE-inliner), bags or bulk on request. Pallet: CP3 or CP9 (114 cm x 114 cm).

### SHELF LIFE, STORAGE AND HANDLING

The granule should be stored cool, shaded and dry in the closed PE-inliner bag. During storage BIOPLAST 200 can take up humidity. Therefore, once an Octabin or a bag is opened, the material should be processed without delay.

Following these recommendations it is advisable to use the material within 6 months after delivery.

### SAFETY DATA

BIOPLAST 200 is not a dangerous product as defined by directive 67/548/EEC and not subject to transport regulations. General safety, protection and hygiene rules for the handling of the molten granule, as for any other polymer, should be observed. For details please refer to the Material Safety Data Sheet (MSDS).

### DISCLAIMER

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with our General Conditions of Sale and Delivery.

## QUALITY AND ENVIRONMENTAL MANAGEMENT

Quality and Environmental Management is a central component of BIOTEC's corporate strategy.

BIOTEC has successfully implemented a Quality and Environmental Management System and is certified by TÜV Rheinland according to DIN EN ISO 9001:2008 and DIN EN ISO 14001:2004. The certifications include all services which BIOTEC provides in connection with the development, production and marketing of BIOPLAST material.

Regular audits and training courses for the employees contribute to maintaining the high quality standard as well as the continuous improvement of the Quality and Environmental Management System.



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