

WE MAKE BIOPLAST



 **BIOPLAST®**  
900

-  69% biobased
-  High heat resistant
-  Fit for food packaging

  
**BIOTEC®**  
BIOPLASTICS FOR A BETTER LIFE

# BIOPLAST<sup>®</sup>

# 900

BIOPLAST 900 is a plasticizer-free thermoplastic material that contains a high portion of renewable materials. The biobased carbon share of the formulation is close to 70%. BIOPLAST 900 is available for sheet extrusion/thermoforming (BIOPLAST 900 TF) and for injection moulding purposes (BIOPLAST 900 IM). The absence of plasticizer allows the material to be easily processed to stable products of consistent quality. BIOPLAST 900 has an excellent shelf life but will biodegrade readily under industrial composting conditions. Both BIOPLAST 900 grades are suitable for food contact applications. Typical finished products include coffee capsules, cups, trays and stirrers.

## PROPERTIES

Parameter	Target value	Unit Test	Method
Pellet size	3.0	mm	Caliper gauge
Density	1.35	g/cm <sup>3</sup>	EN ISO 1183-1/A
Bulk density	850	kg/m <sup>3</sup>	EN ISO 60
MFR (190°C, 2.16 kg)	8	g/10 min	EN ISO 1133
Moisture content	< 0.2	weight-%	BIOTEC test directive

## PROCESSING

BIOPLAST 900 was developed for applications that require an improved temperature resistance (90-100°C). In order to achieve this heat resistance, a crystallization step of the finished product is essential.

## HOW TO OBTAIN HEAT STABILITY?

Products that are based on BIOPLAST 900 grades obtain their heat stability after crystallisation. Optimal temperature conditions for crystallisation are at 90-100°C, thus minimizing cycle times. For thermoforming this can be achieved by applying a pre-heating step, in combination with a heated mould. For injection moulding crystallisation can be performed in a heated mould for products with a cycle time of 20s or more. In other cases, an inline or off-line heat treatment can be considered, preferably in a simple mould in order to avoid product deformation.

## Products made of BIOPLAST 900

- are applicable for hot filling (e.g. beverages)
- are biodegradable according to EN 13432
- are recyclable
- are printable by flexographic and offset printing
- can be coloured with masterbatches

## General applications

- injection moulded articles (e.g. cutlery, clips, coffee capsules, cups for hot and cold drinks)
- semi-finished products
- thermoformed products (e.g. food trays)
- blend partner in combination with other BIOPLAST materials (e.g. BIOPLAST GS 2189 for better flow characteristics)

## Sustainability

BIOPLAST 900 contains 75% of renewable raw material and has a biobased carbon share of 69% according to ASTM D6866 and ISO 16620-2.

## End of life options

BIOPLAST 900 is compostable, recyclable and can be incinerated.

## Compostability

Products made of BIOPLAST 900 are completely biodegradable and, depending on their thickness, compostable. The material is certified by TÜV AUSTRIA Belgium according to EN 13432 awarding the "OK compost INDUSTRIAL" logo.



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## For rigid applications

### Food Packaging

BIOPLAST 900 is mainly designed for packaging dry and/or fatty food. All raw materials used for BIOPLAST 900 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 900 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 granules should be stored under dry and ambient conditions in the closed PE-inliner bag. During storage the products can take up humidity. Once a bag or an octabin 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 900 is not a dangerous product as defined by regulation (EC) No (272/2008) [CLP] 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).

## QUALITY, ENVIRONMENTAL AND ENERGY MANAGEMENT

Quality, Environmental and Energy Management is central component of BIOTEC's corporate strategy which has been successfully implemented and merged into an Integrated Management System.

The certifications by TÜV Rheinland according to DIN EN ISO 9001:2015, DIN EN ISO 14001:2015 and DIN EN ISO 50001:2018 respectively cover all processes and services provided by BIOTEC.

Regular audits and training courses for our employees contribute to maintaining the high-quality standard as well as the constant striving for improvement of the Quality, Environmental and Energy Management System.

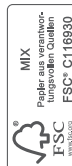
### Disclaimer

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