




WE MAKE BIOPLAST




BIOPLAST[®]
TPS[®]

-  100% biobased
-  Fit for food packaging
-  Water vapour permeable

BIOPLAST[®]

TPS[®]

BIOPLAST TPS[®] is a thermoplastic and transparent material that is completely based on biologically sourced raw materials. The biobased carbon share of the entire formulation is 100%. BIOPLAST TPS[®] is suitable for processing by injection moulding and sheet extrusion to produce items that are completely biodegradable. The material exhibits a good permeability to water vapour, but also provides a good barrier to oxygen and carbon dioxide. BIOPLAST TPS[®] is manufactured from pure food ingredients and can be produced according to the hygienic requirements for food production. Due to its composition the material is edible, digestible, water soluble and will biodegrade readily in an industrial or domestic composting environment.

PROPERTIES

Parameter	Target value	Unit	Test Method
Pellet size	3.0	mm	Caliper gauge
Density	1.4	g/cm ³	EN ISO 1183-1/A
Bulk density	860	kg/m ³	EN ISO 60
Moisture content	< 5	weight-%	BIOTEC test directive

PROCESSING

BIOPLAST TPS[®] was designed for use in sheet film extrusion as well as injection moulding.

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

FILMS MADE OF BIOPLAST TPS[®]

- are biodegradable according to EN 13432
- are recyclable
- have a soft touch
- can be coloured with masterbatches
- are thermoformable
- dissolve in hot water

GENERAL APPLICATIONS

- short life packaging
- single-use products
- food packaging
- thermoformed products
- injection moulded products
- dissolvable products (hot water)

SUSTAINABILITY

BIOPLAST TPS[®] contains 100% of renewable raw material and has a biobased carbon share of 100% according to ASTM D6866.

END OF LIFE OPTIONS

BIOPLAST TPS[®] is compostable, recyclable and can be incinerated.

COMPOSTABILITY

Products made of BIOPLAST TPS[®] are completely biodegradable and compostable in industrial as well as domestic composting units.

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

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

FOOD PACKAGING

BIOPLAST TPS® is mainly designed for packaging dry and/or fatty food. All raw materials used for BIOPLAST TPS® 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 TPS® is available in bags. 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 bag. During storage BIOPLAST TPS® can take up humidity. Therefore, once a bag is opened, the material should be processed without delay.

Following these recommendations it is advisable to use the material within 3 months after delivery.

SAFETY DATA

BIOPLAST TPS® 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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