

WE MAKE BIOPLAST




BIOPLAST[®]
105

-  67% biobased
-  Injection moulding
-  Fit for food packaging

BIOPLAST[®]

105

BIOPLAST 105 is a plasticizer-free, thermoplastic and transparent material that contains a high portion of biologically sourced raw materials. The biobased carbon share of the formulation achieves 67%. BIOPLAST 105 is easy-flowing and therefore particularly suitable for processing by injection moulding to produce items that are completely biodegradable. The material can also be converted by sheet and blown film extrusion. The absence of plasticizer allows the material to be easily processed to manufacture stable products of consistent quality. BIOPLAST 105 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	1.24	g/cm ³	EN ISO 1183-1/A
Bulk density	830	kg/m ³	EN ISO 60
MFR (190°C, 2.16 kg)	4.1	g/10 min	EN ISO 1133
Moisture content	< 0.2	weight-%	BIOTEC test directive

PROCESSING

BIOPLAST 105 was designed for use in injection moulding, but also can be processed in conventional equipment for sheet film extrusion (thermoforming), cast film production and blown film extrusion.

For further processing information, please refer to our specific guidelines.

THERMAL PROPERTIES

Parameter	Typical value	Unit	Test Method
Vicat A, softening temperature (VST/A120)	58	°C	EN ISO 306

Products made of BIOPLAST 105

- are recyclable
- are printable by flexographic and offset printing without pretreatment
- can be coloured with masterbatches
- are sealable (hot, RF, ultra sonic)

General applications

- injection moulded articles (e.g. cutlery and clips)
- semi-finished products
- thermoformed products (e.g. food trays)
- blend partner in combination with other BIOPLAST materials (e.g. BIOPLAST GF 106/02)

Sustainability

BIOPLAST 105 contains 70% of renewable raw material and has a biobased carbon share of 67% according to ASTM D6866 and ISO 16620-2.

End of life options

BIOPLAST 105 is compostable, recyclable and can be incinerated.

Compostability

Products made of BIOPLAST 105 are completely biodegradable and, depending on their thickness, compostable. The material is certified and registered by TÜV AUSTRIA Belgium according to EN 13432 awarding the "OK compost INDUSTRIAL" logo.



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For rigid applications

Delivery format

BIOPLAST 105 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 105 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.

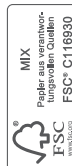
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