BIOPLAST® GF 106/02

Thermoplastic

BIOTEC GmbH & Co. KG

Message:

BIOPLAST GF 106/02 is BIOTEC's trademark for a completely new, plasticizer-free thermoplastic material. As a result of plasticizer absence no material built-up or steam occurs during processing of BIOPLAST GF 106/02. The material is extremely suitable for blown film extrusion, sheet film extrusion, tube extrusion and injection moulding of completely biodegradable products. The complete biodegradability and other functional properties enable the converter to advance in production areas, which could not be reached with traditional thermoplastic materials. The potato starch used for BIOPLAST GF 106/02 is native and not blended with plasticizer (which would be necessary for example to produce thermoplastic starch, TPS). BIOPLAST GF 106/02 therefore exhibits outstanding processing and performance characteristics as well as an excellent shelf life.

General Information	
Features	Biodegradable
	Excellent Printability
	Food Contact Acceptable
	Gasoline Resistance
	Good Colorability
	Grease Resistant
	Oil Resistant
	Renewable Resource Content
	Soft
Uses	Agricultural Applications
	Bags
	Film
	Food Packaging
	Packaging
Agency Ratings	ASTM D 6400
	EEC 2002/72/EC
	EN 13432
Forms	Granules
Processing Method	Blown Film
	Film Extrusion
	Injection Molding
	Sheet Extrusion
	Thermoforming

Physical	Nominal Value	Unit	Test Method
Density	1.20 to 1.30	g/cm³	ISO 1183
Apparent Density	0.74 to 0.80	g/cm³	ISO 60

Melt Mass-Flow Rate (MFR) (190°C/5.0 kg)	2.5 to 3.5	g/10 min	ISO 1133
Particle Size	1.50 to 2.50	mm	
Water Content	< 0.50	wt%	Internal Method
Oxygen Permeability (80.0 µm)	750	$cm^3/m^2/bar/24\ hr$	DIN 53380-3
Films	**Nominal Value**	**Unit**	**Test Method**
Film Thickness - Tested	> 10	µm	ISO 2286-3
Tensile Strength			ISO 527-3
MD : 23°C, 10 µm	20.0 to 35.0	MPa	
TD : 23°C, 10 µm	20.0 to 35.0	MPa	
Tensile Elongation			ISO 527-3
MD : Break, 10 µm	600 to 900	%	
TD : Break, 10 µm	600 to 900	%	
Water Vapor Transmission Rate (80 µm)	120	$g/m^2/24\ hr$	DIN 53122
Fill Analysis	**Nominal Value**	**Unit**	**Test Method**
Melt Density	1.10 to 1.20	g/cm^3	ISO 1133

Recommended distributors for this material

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