



IfBB

Institute for Bioplastics
and Biocomposites



Technical datasheet

IfBB Blend TM2500

Product description

The IfBB Blend TM2500 is a specially developed Bio-PA 10.10 modification, which is particularly characterised through the low tensile modulus of elasticity. The material can be processed via injection moulding at a mould temperature of 60 °C. Through the application of specific natural fibres as well as the good flowability, not only thick-walled but also thin-walled components can be produced using the IfBB Blend TM2500.

Physical properties

Mechanical properties	Value	Unit	Test method / Norm
Tensile modulus of elasticity	~ 2500	MPa	DIN EN ISO 527-2
Tensile strength	~ 50	MPa	DIN EN ISO 527-2
Charpy impact strength	~ 26	kJ/m ²	DIN EN ISO 179 / 1 e U (23°C)
Charpy notched impact strength	-	kJ/m ²	DIN EN ISO 179 / 1 e A (23°C)
Thermal properties	Value	Unit	Test method / Norm
Heat deflection temperature (HDT-A)	~ 60	°C	DIN EN ISO 75-2
Heat deflection temperature (HDT-B)	-	°C	DIN EN ISO 75-2
Melting point	~ 198	°C	DIN EN ISO 11357-1
Glass transition temperature	-	°C	DIN EN ISO 11357-1
Rheological properties	Value	Unit	Test method / Norm
Melt flow rate (235°C / 2.16kg)	~ 7	g/10min	DIN EN ISO 1133
Melt volume rate (235°C / 2.16kg)	~ 7	cm ³ /10min	DIN EN ISO 1133
Other properties	Value	Unit	Test method / Norm
Density	- 1.1	g/cm ³	DIN 1183-1, A

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Processing via injection moulding

Material conditioning	Value	Unit
Processing humidity	< 1000	ppm
Drying temperature	80	°C
Drying duration	8 - 12	h
Injection moulding settings	Value	Unit
Mould temperature*	60	°C
Temperature zones		
Flange	50-55	°C
Zone 1	190	°C
Zone 2	200	°C
Zone 3	205	°C
Zone 4	205	°C
Zone 11	210	°C
Zone 13	260	°C

*The thermomechanical properties are dependent on the mould temperature; the specified temperature should therefore be used. Furthermore, at this temperature, the shortest residual cooling time/cycle time is to be expected.

Contact

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