PolBionix™ Technical Data Sheet

Material for Injection moulding plant pots

Product Description

PolBionix™ is a biobased and biodegradable material designed to produce pots for nurseries and garden centres, or for similar applications. The unique combination of strength and flexibility of the PolBionix™ material gives good mechanical properties while being suited to be used through injection moulding manufacturing. PolBionix™ is therefore well suited for the mass production of plant pots.

It is not suitable for food contact applications.

Typical Properties:

Properties	Test Method	Unit	PolBionix™
Density	ASTM D792	g/cm³	1.25
MFR (230°C, 2.16kg)	ASTM D1238	g/10min	44.5
Melting point	ASTM D3418	°C	175
Tensile modulus	ASTM D638	MPa	1530
Tensile Strength at yield	ASTM D638	MPa	30
Tensile Strain at yield	ASTM D638	%	10
Flexural modulus	ASTM D790	MPa	1434
Flexural Strength at yield	ASTM D790	MPa	51
Flexural Strain at yield	ASTM D790	%	7
Notched Izod Impact (23°C)	ASTM D256-10	J/m	43
Heat Deflection Temperature (1.8 MPa)	ISO 75-1	°C	52
Poison ratio	ASTM D638	N/A	0.347
Appearance	N/A	N/A	Beige opaque

Process Information:

Recommended Processing Temperatures	
Nozzle	235°C
Front cylinder	230°C
Middle cylinder	220°C
Rear cylinder	180°C
Hopper	150°C
Mould	25°C

Other information

PolBionix™ is dried and packed in aluminium bags before delivering to customers. Keep in a dry and dust-free environment, ideally at around ambient temperature. Do not store outside. Humidity, excessive heat and direct sunlight should be avoided to prevent possible deterioration of the material's properties. It is preferred to keep bags sealed until ready to process. Unopened bags of PolBionix™ do not need to be pre-dried, but any leftovers will need to be tightly sealed to avoid contact with air and pre-dried at 60°C for over 4 hours before their next use.

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