

# **Technical Data Sheet**

**BIOMAT PLA B0071** 

# A biodegradable polyester compound for injection moulding. Can be processed without problems on all commonly used machines OK compost INDUSTRIAL (EN 13432, certified by TÜV AUSTRIA Belgium).

Applications	F	eatures
Cutlery		Renewable Resource Content
Coffee Capsules		Food Contact Acceptable
		Compostable
Sustainability		
Bio-Based Content 65%		
Compostability Industrially Com	npostable	
Physical Properties		
Density	1.44 g/cm <sup>3</sup>	ISO 1183
Melt Volume Flow Rate	10 cm <sup>3</sup> /10min	ISO 1133
Mechanical Properties		
Charpy Impact Strength	50 kJ/m²	ISO 179-1/1eU
Charpy Notched Impact Strength	4 kJ/m²	ISO 179-1/1eA
Tensile Elongation	2 %	ISO 527-1-2 At Yield
Tensile Elongation	4.7 %	ISO 527-1-2 At Break
Tensile Modulus	4100 MPa	ISO 527-1-2
Tensile Strength	40 MPa	ISO 527-1-2
Tensile Strength	41 MPa	ISO 527-1-2 At Yield
Thermal Properties		
Heat Distortion Temperture	50 - 115 °C	ISO 75/B
Shrinkage	0.4 - 0.21 %	
Processing Methods		
Injection Moulding		
njection Parameters		
Drying Temperature	80 °C	
Drying Time	4 hr	
Mould Temperature	40 °C	
Nozzle Temperature	175 - 195 °C	
Processing (Melt) Temp	230 °C	
Zone 1	175 - 195 °C	
Zone 2	175 - 195 °C	
Zone 3	175 - 195 °C	



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#### Forms

Pellets

# Notes

Safety precautions:

- Processing at a melt temperature not higher than 230 °C
- · Processing with adequate ventilation

#### Handling:

- Keep package sealed until use
- · Reseal opened package directly after use

# Drying:

• In case the product becomes too humid: drying at 80 °C for 4 h by using a vacuum dryer or purging with dry air (dew point -35 °C)

Recommended humidity below 0.1 %

Start-up:

- Purge with polyolefin with MFR = 30 g/10 min for ~10 minutes
- Lower the temperature to recommended settings
- Start transition while purging the screw, when the temperatures are within 10 °C of desired range

#### Equipment:

- Designed for standard equipment
- For best performance hot runners are recommended

Interruption & shut-down:

- Never leave the product in processing equipment for a long periods, e.g. over night
- By interruption for a considerable time, slow down screw speed to 5 rpm approx.
- For a longer period, please purge with same polyolefin from start-up procedure

# **Estimated Properties**

Properties identified as 'Estimated\*\*' have been estimated from the generic equivalent. These are provided for comparative purposes and are not reflective of the actual grade as the relevant data is not available.

# **Storage Recommendations**

Keep dry at ambient temperature. Store indoors avoiding a humid environment, heat and direct sunlight. Use material within 6 months after delivery date, in order to prevent possible material quality deterioration.

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