

Technical Data Sheet

BIOMAT PLA A351A

A thermoplastic resin composed primarily of poly(lactic acid) (PLA) which is both renewable and industrially compostable. It is produced from the fermentation of sugar or corn to produce lactic acid, followed by polymerisation via the intermediate lactide. It has a considerably lower carbon footprint than fossil-fuel based plastics and can be both mechanically and chemically recycled.

This generic grade, which is characterised by its excellent transparency and processability, is suitable for a variety of applications including 3D printing, films and fibres. It is food contact acceptable and can be readily processed by both extrusion and thermoforming and has a slightly higher melting temperature (170 - 180 °C).

Applications		Features
Thermoforming Applications Laminates Fabrics/Textiles		Renewable Resource Content Food Contact Acceptable Compostable
3D Printing		
Physical Properties		
Density	1,25 g/cm ³	GB/T 1033.1-2008
Melt Flow Rate	2 - 12 g/10min	GB/T 3682.1-2018 190°C/2.16 kg
Mechanical Properties		
Charpy Impact Strength	1 kJ/cm ²	GB/T 1043.1-2008
Notched Izod Impact Strength	4 J/m	GB/T 1043.1-2008
Tensile Elongation at Break	3 %	GB/T 1040.1-2018
Tensile Strength	50 MPa	GB/T 1040.1-2018
Thermal Properties		
Glass Transition Temperature	60 °C	GB/T 19466.2-200
Melt Temperature	170 - 180 °C	GB/T 19466.3-200
Chemical Properties		
D-Content	1 %	
Processing Methods		
Extrusion		
Thermoforming		
Appearance		
Clear/Transparent		

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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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