EMNANDI BIOPLASTICS
BEYOND NET ZERO

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	Renewable Resource Content
Laminates	Food Contact Acceptable
Fabrics/Textiles	Compostable
3D Printing	

Physical Properties				
Density	1,25	g/cm³	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/cm²	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				

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.