

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 specialised grade is characterised by its mechanical strength, surface gloss and opacity. It is well-suited for durable applications and can be readily processed by injection moulding.

Applications	Features
Toys	Non-Food Contact
Stationery Supplies	Impact Resistance
	Compostable
	Renewable Resource Content

Sustainability	
Bio-Based Content	100%
Compostability	Industrially Compostable

Physical Properties		
Density	1.25 - 1.35 g/cm <sup>3</sup>	GB/T 1033.1-20
Melt Mass Flow Rate	10 - 25 g/10min	GB/T 3682.1-20 (190°C/2.16 kg)

Mechanical Properties		
Charpy Impact Strength	2 kJ/m <sup>2</sup>	GB/T 1043.1-20
Shrinkage	0.003 %	ISO 294-4:2018 Flow
Tensile Elongation	5 %	GB/T 1040.1-20 At Break
Tensile Strength	35 MPa	GB/T 1040.1-20

Processing Methods
Injection Moulding

Appearance
Opaque

### Notes

#### 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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*Information in this document is based on our current knowledge and experience and can vary by batch. It does not relieve customers of the responsibility to carry out their own tests and experiments nor do they imply any legally binding assurance. Customers are responsible to determine their freedom to operate to ensure that their products do not infringe any intellectual properties. Emnandi Bioplastics Ltd assumes no obligation or liability for the information in this document.*