

PLA Technical Data Sheet(TDS)

PHYSICAL PROPERTIES		
Property	Testing Method	Typical Value
Density	ISO1183, GB/T1033	1.17 g/cm ³ at 21 °C
Melt Index	210°C, 2.16 Kg	7-10g/10min

Thermal Properties		
Property	Testing Method	Typical Value
Glass transition	DSC, 10°C/min	61 °C
Melting temperature	DSC, 10°C/min	150 °C
Crystallization temperature	DSC, 10°C/min	113.5 °C
Vicat softening temperature	ISO 306 GB/T 1633	62.9 °C
Heat deflection temperature	ISO 75 1.8MPa	58.1 °C
Heat deflection temperature	ISO 75 0.45MPa	59.8 °C

Mechanical		
Property	Testing Method	Typical Value
Young's modulus (X-Y)	ISO 527, GB/T 1040	2636 ± 330 MPa
Young's modulus (Z)		N/A
Tensile strength (X-Y)	ISO 527, GB/T 1040	46.6 ± 0.9 MPa
Tensile strength (Z)		43.5 ± 3.1 MPa
Elongation at break (X-Y)	ISO 527, GB/T 1040	1.90 ± 0.21 %
Bending modulus (X-Y)	ISO 178, GB/T 9341	3283 ± 132 MPa
Bending strength (X-Y)	ISO 178, GB/T 9341	85.1 ± 2.9 MPa
Charpy impact strength (X-Y)	ISO 179, GB/T 9343	2.68 ± 0.16 KJ/m ²