

PLA (Polylactic Acid 3D850) 3D Filament Data Sheet

Physical Properties – Typical Values

Property	Value (SI Units)
Tensile Modulus (ASTM D638)	2315 MPa
Ultimate Tensile Strength (D638)	50 MPa
MFR (D1238)	7 – 9 g/10 min
Elongation at Break (D638)	3.3%
Specific Gravity, ASTM D792	1.24 gm/cm ³
Izod Impact, 23 C, (ASTM D256)	118 J /min
Glass Transition Temp, ASTM D792	55 to 60 °C
Heat Distortion Temp, (ASTM E2092)	80 to 90 °C

3D Printing Guide

Property	Value (SI Units)
Recommended Print Speed	50 - 80 mm /s
Recommended Nozzle Temperature	205 – 225 °C
Recommended Bed Temperature	60 °C
Preferred Bed Adhesive	Glue, Blue Painters Tape
Special Considerations	Consider Recycling Spools & Unwanted Parts
Nominal Outer Diameter	1.75mm / 2.85mm (Industry Standard +/- 3%)
Available Sizes	750gm, 1KG, 3KG

Suggested Applications

Poly lactide, also known as Polylactic Acid, is a biodegrade thermoplastic. Synthesized from organic sugars, PLA has become the most common material for 3D filaments due to its eco-friendliness and ease of use. PLA maintains several desirable properties for 3D printing such as a low melting temperature and glass transition temperature. As a result, PLA offers a high level of detail and exceptional print quality. Ideal for prints where strength is not critical.

Available in Multiple Colors: Custom Pantone Selection upon request (MOQ of 10 KG)

Material is produced using both virgin and reprocessed materials from consistent sources.

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