



FILATECH
Making It Better

PLA Filament

PLA - POLYLACTIC ACID

PLA (Polylactic Acid) is one of the two most commonly used desktop 3D printing filaments (with the other being ABS filament). It is the "default" recommended material for many desktop 3D printers, and with good reason - PLA is useful in a broad range of printing applications, has the virtue of being both odorless and low-warp, and does not require a heated bed.

PLA filament is also one of the more eco-friendly 3D printer materials available; it is made from annually renewable resources (corn-starch) and requires less energy to process compared to traditional (petroleum-based) plastics. Outside of 3D printing, PLA plastic is often used in food containers, such as candy wrappers, and biodegradable medical implants, such as sutures. Our PLA filaments for 3D Printing are available in a wide range of colors in both 1.75mm and 2.85mm.

The latest range of PLA filaments have been developed by our expert engineers utilizing the latest technology and high quality prime virgin raw material.

OPTIONS:

Size:	1.75	mm +/- 0.03 mm
	2.85	mm +/- 0.03 mm
Color:	Full Color Range (Special Colors By Order)	
Packaging:	0.5	Kg Spools
	1.0	Kg Spools
	30	gr Loops (Sample)

FEATURES:

- Lower melting point for easier printing
- Free from harmful or hazardous materials
- Lower shrinkage rate
- High rigidity with minimal flex
- Produces higher quality prints
- Proper for printing large parts with almost no warping
- Can be printed without heated bed.
- No chemical odors produced during printing

SPECIFICATIONS:

Filament Material:	PLA	
Specific Gravity:	1.25	gr/cm ³
Size:	1.75	mm +/- 0.03 mm
	2.85	mm +/- 0.03 mm
Printing Information:	Extruder: 190 – 220 °C	
	Bed:	40 – 60 °C (Only for big parts)
Working Temperature:	Starts losing mechanical strength at 60 °C	

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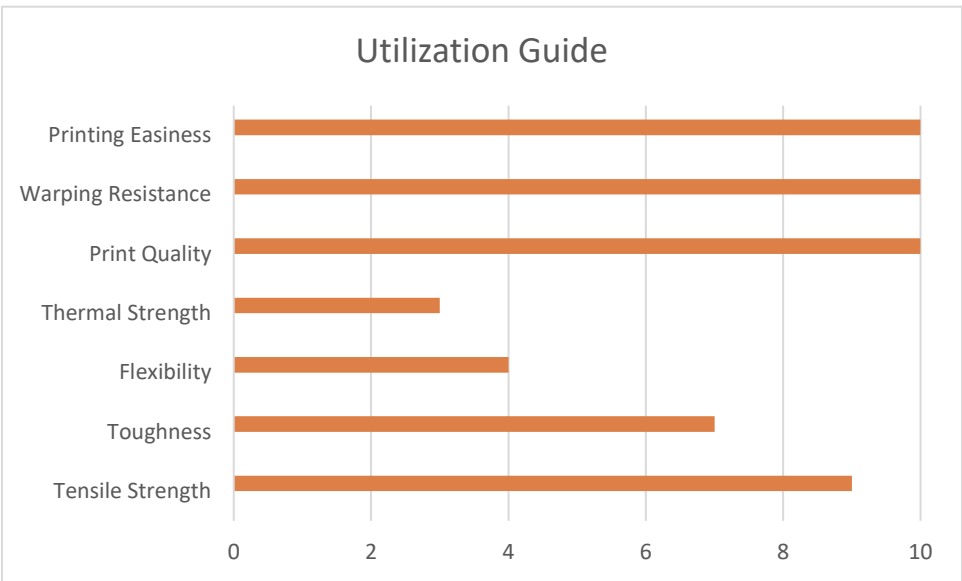
ENGINEERING PROPERTIES:

Properties	Value	Standard
Physical Properties		
Density (g/cm ³)	1.25±0.05	GB/T1033-1986
Melt Index, g/10min (190°C/2.16kg)	4-7	GB/T3682-2000
Melting Point (°C)	175-179	GB/T19466.3-2004
Glass Transition Temperature (°C)	60-62	GB/T19466.2-2004
Mechanical Properties		
Tensile Strength (MPa) ≥	55	GB/T1040-1992
Elongation at Break (%)≥	100	GB/T1040-1992
Impact Strength (KJ/m ² , Izod) ≥	3.5	GB/T1043-1992

UTILIZATION GUIDE:

(Comparative, Out of 10)

Tensile Strength	9
Toughness	7
Flexibility	4
Thermal Strength	3
Print Quality	10
Warping Resistance	10
Printing Easiness	10



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CERTIFICATES:

Management:	BS EN ISO 9001:2015
Quality:	CE (CE-2924)
Environment:	RoHS (UQ-5724)