

# **PLA**

PLA is a tough, easy to use high grade filament, ideal for 3D printing. Slightly modified, the filament retains the typical features of PLA, but is tougher and less brittle. Due to a low shrinkage factor PLA will not deform after cooling. Poly Lactic Acid is a biodegradable plastic made from renewable natural resources and one the most popular materials for printing.

### **Features:**

- Stronger and less brittle than regular PLA
- Easy to print at low temperature
- Low warp
- Biodegradable
- Limited smell

#### Filament specs.

Size	Ø tolerance	Roundness
1.75mm	±0.05mm	≥ 95%
2.85mm	±0.10mm	≥ 95%

## **Material properties**

Description	Test method	Typical value
Specific gravity	ISO 1183	1.24 g/cc
MFR 210°C/2,16 kg	ISO 1133	9.56 gr/10 min
Yield Stress	ISO 527	69.8 Mpa
Strain at yield	ISO 527	4.8%
Strain at break	ISO 527	19.5%
E-Modulus	ISO 527	3120 Mpa
Impact strength -	ISO 179	3.4 kJ/m2
Moisture absorption	ISO 62	1968 ppm
Printing temp.	DF	180-210°C
Melting temp.	ISO 11357	77-146°C
Vicat softening temp.	ISO 306	60°C
Glass transition temp.	ISO 11357	57°C

## **Additional info:**

Due to its low tendency to warp, PLA can be printed without a heated bed. If you have a heated bed the recommended temperature is 35-60°C.

PLA can be used on all common desktop FDM or FFF technology 3D printers.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.