TECHNICAL DATA SHEET

INFILL PLA FILAMENT

LAST UPDATED : 10.01.2026

PLA filament is known for its ability to create 3D printed parts with fine details and a textured, matte surface finish, making it a popular choice for aesthetically pleasing prints.

Key Features

- Less warping
- Easy to use
- Biodegradable and nature-friendly
- Better layer adhesion
- No heated bed required
- Less nozzle clogging

Applications

- Prototyping & design
- Architecture models
- Orthopaedic Models
- Education & visualization
- Models required to be biodegradable
- Art

Specifications

Material Name	PLA
Chemical Name	Polylactic Acid
Diameter	1.75 ± 0.03 mm
Net Filament Weight	1 kg

Recommended Print Settings

Drying Settings	40 °C, 4h
Nozzle Size	0.2, 0.4, 0.6 mm
Nozzle Temperature & Printing Speed	180 - 200 °C at 50 - 100 mm/s 200 - 220 °C at 100 - 300 mm/s
Bed Temperature	50 - 60 °C
Cooling Fan Speed	100%
Bed Type	Textured PEI Sheet, Cool Plate

Physical Properties

Property	Method	Metric
Density	ISO1183	1.24 g/cm^3
Melting Temperature, 10 °C/min	ISO11357-3	166 °C
Glass Transition Temperature, 10 °C/min	ISO11357-3	65.3 °C
Heat Deflection Temperature at 0.45 MPa	ISO75	55 °C
Shore D Hardness	ISO868	83D

Mechanical Properties

Property	Method	Metric
Tensile Strength	ASTM D638 / ISO527	55.04 MPa
Elongation at Break	ASTM D638 / ISO527	4.01%
Young's Modulus	ASTM D638 / ISO527	1417.79 MPa
Flexural Strength	ASTM D792 / ISO178	92.25 MPa
Flexural Modulus	ASTM D792 / ISO178	3463.62 MPa
Izod Impact, Notched (X-Y, 23 °C)	ASTM D790 / ISO180	19.20 KJ/mm²

Address: Nallagandla, Telangana, India.

Contact:
WhatsApp: +917075930303
Support: office@infill3d.in

Disclaimer: