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# TECHNICAL DATA SHEET Inslogic Matte PLA Filament



Inslogic Matte 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	Inslogic Matte PLA
Chemical Name	Polylactic Acid
Diameter	1.75 ± 0.02 mm
Net Filament Weight	1 kg

## **Recommended Print Settings**

Drying Settings	50 °C, 4h
Nozzle Size	0.2, 0.4, 0.6 mm
Nozzle Temperature & Printing Speed	205 - 215 °C at 50 - 100 mm/s 215 - 245 °C at 100 - 230 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	1.3 g/cm <sup>3</sup>
Melting Temperature, 10 °C/min	ISO11357-3	162.6 °C
Glass Transition Temperature, 10 °C/min	ISO11357-3	58.8 °C
Heat Deflection Temperature at 0.45 MPa	ISO75	55 °C
Percentage Shrinkage at 23 °C	ISO294	0.1 - 0.3 %



### **Mechanical Properties**

Property	Method	Metric
Tensile Strength	ISO527/2	52.02 MPa
Elongation at Break	ISO527/2	9.87%
Young's Modulus	ISO527/2	4875 MPa
Flexural Strength	ISO178	64.00 MPa
Flexural Modulus	ISO178	2278 MPa
Izod Impact, Notched (X-Y, 23 °C)	ISO180	5.01 KJ/m²

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