

TECHNICAL DATA SHEET Inslogic High-Speed PLA Filament



Inslogic High-Speed PLA offers fast 3D printing at speeds up to 600 mm/s, without compromising on quality. Optimized for projects of all sizes, it is user-friendly, ensuring quick and reliable production to bring your ideas to life effortlessly.

Key Features

- Easy to use
- Biodegradable and eco-friendly
- Enhanced flowability and inter-layer adhesion
- Supports super-fast printing speeds up to 600 mm/s
- Excellent quality and surface finish even at high speeds

Applications

- Rapid prototyping & functional part production
- Art & design
- Architecture models
- Education
- Everyday use

Specifications

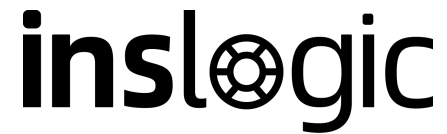
Material Name	Inslogic High-Speed PLA
Chemical Name	Polylactic Acid
Diameter	1.75 ± 0.02 mm
Net Filament Weight	1 kg

Recommended Print Settings

Drying Settings	50 °C, 4h
Nozzle Size	0.2, 0.4, 0.6 mm
Nozzle Temperature & Printing Speed	190 - 210 °C at 50 - 150 mm/s 200 - 230 °C at 150 - 300 mm/s 230 - 260 °C at 300 - 600 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	1.26 g/cm ³
Melting Temperature, 10 °C/min	ISO11357-3	165.3 °C
Glass Transition Temperature, 10 °C/min	ISO11357-3	67.2 °C
Heat Deflection Temperature at 0.45 MPa	ISO75	58.2 °C
Shore D Hardness	ISO868	81D



Mechanical Properties

Property	Method	Metric
Tensile Strength	ISO527/2	55.40 MPa
Elongation at Break	ISO527/2	15.20%
Flexural Strength	ISO178	77.20 MPa
Flexural Modulus	ISO178	2390 MPa
Izod Impact, Notched (X - Y, 23 °C)	ISO180	6.01 KJ/m ²



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