

TECHNICAL DATA SHEET Inslogic High-Speed PLA Pro Filament



Inslogic High-Speed PLA Pro Filament is an upgraded material for rapid 3D printing at speeds up to 600 mm/s. With a flexural strength of 75 MPa, it offers enhanced toughness, impact resistance, and durability - perfect for strong, reliable parts. Engineered for smooth extrusion and fast cooling, it provides high accuracy, reduced clogging, and consistent print quality without compromising mechanical strength.

Key Features

- Advanced upgrade of HS PLA
- Rapid printing speeds up to 600 mm/s
- Greater toughness, impact resistance & durability
- Improved flowability & inter-layer adhesion
- Excellent quality & surface finish even at high speeds
- Easy to print, biodegradable & eco-friendly

Applications

- Rapid prototyping
- Conceptual models
- Educational projects
- Art and design
- End-use parts



Specifications

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

Recommended Print Settings

Drying Settings	50 °C, 4-6h
Nozzle Size	0.2, 0.4, 0.6 mm
Nozzle Temperature & Printing Speed	200 - 215 °C at 50 - 150 mm/s 215 - 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

Physical Properties

Property	Method	Metric
Density	ISO1183	1.26 g/cm ³
Melting Temperature, 10 °C/min	ISO11357-3	167 °C
Heat Deflection Temperature at 0.45 MPa	ISO75	55 °C
Shore D Hardness	ISO868	82D



Mechanical Properties

Property	Method	Metric
Tensile Strength	ISO527/2	42 MPa
Elongation at Break	ISO527/2	7.6%
Flexural Strength	ISO178	75 MPa
Flexural Modulus	ISO178	3500 MPa
Izod Impact, Notched (X - Y, 23 °C)	ISO180	11.2 KJ/m ²



3, 13/F, Grand City Plaza
1-17 Sai Lau Kok Road
Tsuen Wan, New Territories
Hong Kong

Contact

WhatsApp: (852) 6268 5255
Sales: sales@inslogic3d.com
Support: support@inslogic3d.com

Disclaimer:

To the best of our knowledge, the information contained herein is accurate. However, Inslogic, Inc. makes no warranty, expressed or implied, regarding the accuracy of these results to be obtained from the use thereof. The results presented in this data sheet are just for your information and comparison. They should not be used for project specifications or its quality evaluation. In view of the many factors that may affect the processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose.

Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/recycling practices of Inslogic materials for the intended application. Inslogic makes no warranty of any kind unless announced separately, to the fitness for any particular use or application. Inslogic shall not be made liable for any damage, injury, or loss induced from the use of Inslogic materials in any particular application. Before using Inslogic material read properly all the details in the available safety data sheet (SDS).