

Technical Data Sheet

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Product Information

IIID MAX PLA (Polylactic Acid) is one of the most widely used 3D printing filaments due to its affordability and ease of use. It is derived from renewable resources such as cornstarch or sugarcane. PLA has low toxicity and low VOC emissions while printing.

Characteristics

- Eco-friendly and biodegradable
- Beginner-friendly and easy to print
- Minimal odor during printing

Filament Specifications

IIID MAX does not opine, using the below data, on the suitability of the filament for any specific application nor on the accuracy of such data. Your results may vary depending on the testing methodology, printing parameters used, and other factors not controlled by IIID MAX. The presented data may not represent how the material will perform in a 3D-printed sample.

Properties	Test Method	Nominal Value	Units
Density	ASTM D792	1.24	g/cm3
Melt Flow Rate (MFR) (210°C/2.16kg)	ASTM D1238	7-9	g/10min
Glass Transition Temperature	ASTM D3418	55-60	°C
Tensile Modulus	ISO 527-1	2315	MPa
Elongation % @ Yield	ISO 527	3.31	%
Tensile Yield Strength	ISO 178	51	MPa
Notched Izod Impact	ASTM D256	118	J/m

Printing Specifications

The following printing specifications are recommendations and may not be accurate for your printer. It is recommended to calibrate new printer filaments to ensure optimal results.

Parameter	Min	Max	Units
Nozzle Temperature	190	230	°C
Bed Temperature	0	70	°C
Printing Speed	20	300	mm/s
Cooling Fan % (not for overhangs)	80	100	%
Cooling Fan % (overhangs)	90	100	%
Drying Temperature	50	60	°C
Drying Time	4	8	hours



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