TECHNICAL DATA SHEET

Filaticum PLA Advanced

3D printing filament for FDM/FFF printer

Product Description

The PLA raw material of PLA Advanced was developed especially for manufacturing 3D printing filaments, which has to meet higher printing needs. The objects printed with this filament are stronger and more durable. Filaticum PLA Advanced also has a higher heat resistance, up to 85 ^{0}C. This filament is less brittle, and with excellent layer adhesion we can achieve an exceptionally even surface and more precise printing.

Specification

	Filaticum PLA Advanced
Diameter	1,75 mm, 2,85 mm
Tolerance	+-0,05 mm, +-0,1 mm
Colours	white, black, red,
Weight	0,75 kg, 1, 0 kg, 2,5 kg
Filament length	ca.: 250 m/0,75 kg

Printer Settings

Nozzle temperature	195-245 °C
Nozzle size	0,2-1,2 mm
Bed temperature	max 90 °C
Bed condition	kapton, glass, tape or glue
Cooling fun	recommended up to 100%
Layer height	0,4-0,8 mm
Print speed	20-80 mm/s, optimal, max 250 mm/s

This printer setting recommended for the starting, can be modified according to the printer, printed objects and required mechanical parameters.

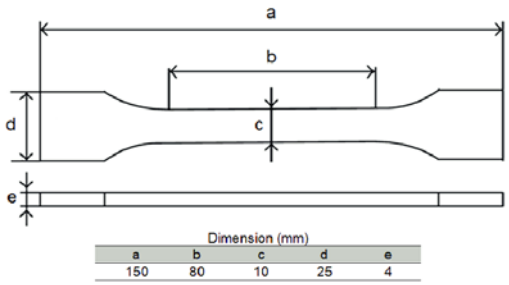
Raw Material Properties

Physical properties *	Method	PLA
Specific Gravity, g/cm^3	D792	1.24
Heat Distortion Temp (HDT)*,°C	D790	ca 82
Glass Trans. Temp, °C	D3418	55-60
Tensile Strength, MPa	ISO 527	66
Tensile Elongation, %	ISO 527	4,3
Tensile Modulus, MPa	ISO 527	4600
Notched Izod Impact, kJ/m2	ISO 180	40

*Typical properties for injection molded amorphous bars; not to be construed as specifications.

**66 psi (0.45 MPa)

Mechanical Properties of 3D Printed Specimen



Dimension (mm)

a	b	c	d	e
150	80	10	25	4

Property		Test method
Tensile Strength	55 +-2 MPa	ISO 527
Tensile Modulus	3,5 +-0,1 GPa	ISO 527
Tensile Elongation	2-4 %	ISO 527
Notched Izod Impact	35 kJ / m2	ISO 180

Material Safety

RoHS compliance	yes
REACH compliance	yes

Producer

Filamania Ltd, H-2310 Szigetszentmiklós, Fenyőfa utca 23/a, Hungary
tel: + 36 30 9313 973, email: info@filaticum.com, www.filaticum.com