

# TECHNICAL DATA SHEET

## Filaticum PLA Advanced PRO

3D printing filament for FDM/FFF printer

### Product Description

Filaticum PLA Advanced PRO filament is a unique composite material. In addition to the standard PLA raw material, it contains additives that alter the usual properties of the bioplastic, both functionally and aesthetically. Thanks to these additives this filament can be printed more easily and is softer than standard PLA products.

### Specification

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

### Printer Settings

Nozzle temperature	190-220 °C
Nozzle size	0,2-1,2 mm
Bed temperature	max 70 °C
Bed condition	kapton, glass, tape or glue
Cooling fan	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.

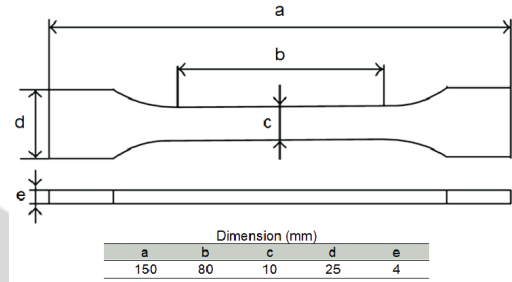
### Raw Material Properties

Physical properties *	Method	PLA
Specific Gravity, g/cm <sup>3</sup>	D792	1.23
Heat Distortion Temp (HDT)*, °C	D790	55
Glass Trans. Temp, °C	D3418	55-60
Tensile Strength, MPa	ISO 527	55
Tensile Elongation, %	ISO 527	9,00
Tensile Modulus, MPa	ISO 527	4200
Notched Izod Impact, kJ/m <sup>2</sup>	ISO 180	26

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

\*\*66 psi (0.45 MPa)

## Mechanical Properties of 3D Printed Specimen



Property		Test method
Tensile Strength	32 $\pm$ 2 MPa	ISO 527
Tensile Modulus	1,8 $\pm$ 0,1 GPa	ISO 527
Tensile Elongation	2-4 %	ISO 527
Notched Izod Impact	4,95 kJ / m <sup>2</sup>	ISO 180

## Material Safety

RoHS compliance	yes
REACH compliance	yes

## Producer

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