

# TECHNICAL DATA SHEET

## Filaticum PLA Foam

3D printing filament for FDM/FFF printer

### Product Description

Objects printed from Filaticum Foam have a foamy, spongy texture. The foam has an open cell structure and is hard. Thanks to the foam structure, the layers are barely visible, the surface is pretty smooth. However, it can be easily sanded, cut, painted and shaped as needed.

The structure of the foam, the quality and structure of the surface can be greatly influenced by changing the printing settings. Objects with the required density and structure can be made by setting the parameters accordingly.

### Applications

Car industry, founding, production of aircraft, ship models, drones. Sculptures, other works of art. Support material

### Specification

	Filaticum PLA Foam
Diameter	1,75 mm, 2,85 mm
Tolerance	+0,05 mm, +0,1 mm
Colours	natural, black
Weight	0,50 kg, 1,5 kg
Filament length	ca.: 250 m/0,50 kg

### Printer Settings

Nozzle temperature	195-250 °C
Nozzle size	0.4-1,2 mm
Bed temperature	max 70 °C
Bed condition	kapton, glass, tape or glue
Cooling fan	recommended up 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.

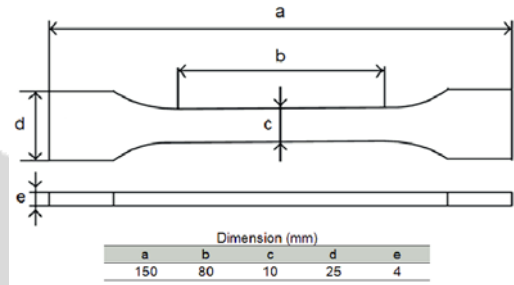
### Raw Material Properties

Physical properties *	Method	PLA
Specific Gravity, g/cm <sup>3</sup>	D792	1.24
Heat Distortion Temp (HDT)*, °C	D790	55
Glass Trans. Temp, °C	D3418	55-60
Tensile Strength, MPa	ISO 527	60
Tensile Elongation, %	ISO 527	6,00
Tensile Modulus, MPa	ISO 527	3800
Notched Izod Impact, kJ/m <sup>2</sup>	ISO 180	16

\*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	under testing	ISO 527
Tensile Modulus	under testing	ISO 527
Tensile Elongation	under testing	ISO 527
Notched Izod Impact	under testing	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](mailto:info@filaticum.com), [www.filaticum.com](http://www.filaticum.com)

*Disclaimer: The information presented are typical values intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. End-use material performance can be impacted by, but not limited to part design, end-use conditions, test conditions, etc. Actual values will vary with build conditions. Product specifications are subject to change without notice. The performance characteristics of these materials may vary according to application, operating conditions, or end-use. Each user is responsible for determining that the material is safe, lawful and technically suitable for the intended application, as well as for identifying the proper disposal method consistent with applicable environmental laws and regulations. Filamania Ltd. makes no warranties of any kind, express or implied including but not limited to the warranties of merchantability, fitness for a particular use.*