

## PLA Extrafill

### Description:

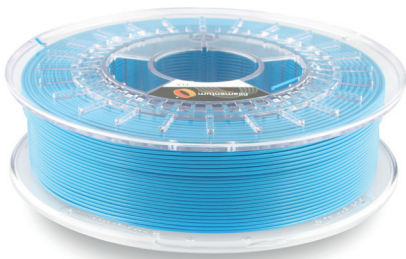
Fillamentum PLA Extrafill is a material for the FFF (also known as FDM) 3D printing technology.

The advantage of this material is that it can be used in 3D printers easily, that it allows a high quality of printing even in tricky details and an excellent lamination of the printed object.

PLA filament is made of natural ingredients and is easily biodegradable by composting. Thanks to its composition, it is biocompatible and suitable for food contact (only excluded "PLA Extrafill Traffic Black/RAL 9017").

Fillamentum guarantees high precision of filament dimensions within the tolerance of +/- 0,05 mm, which is strictly controlled throughout the production.

Printing filaments reported on the marked under the trademark Fillamentum are produced in a wide variety of colours in accordance with the colour charts RAL and Pantone, and also in own unique colour ranges.



Physical properties	Typical Value	Test Method	Test Condition
Material density	1,24 g/cm <sup>3</sup>	ASTM D1505	
Diameter tolerance	± 0,01 mm		
Weight	750 g of filament (+ 250 g spool)		

Mechanical properties	Typical Value	Test Method	Test Condition
Tensile strength	110 MPa	ASTM D882	MD (film oriented 3,5×)
	145 MPa	ASTM D882	TD (film oriented 5×)
Tensile modulus	3310 MPa	ASTM D882	MD
	3860 MPa	ASTM D882	TD
Elongation at break	160 %	ASTM D882	MD
	100 %	ASTM D882	TD
Elmendorf tear	0,6 g/micron	ASTM D1922	MD
	0,25 g/micron	ASTM D1922	TD

Thermal properties	Typical Value	Test Method	Test Condition
Melting temperature	145-160 °C		
Glass transition temperature	55-60 °C		
Flammability	388 °C		Autoignition temperature

Printing properties	Typical Value	Test Method	Test Condition
Print temperature	170-185 °C		
Hot pad	40-50 °C		
Speed of printing	30-40 mm/s		

Optical properties	Typical Value	Test Method	Test Condition
Haze	2,1 %	ASTM D1003	
Gloss	90	ASTM D1003	20 °

Workability of 3D printing filament is at least 12 months from delivery.

The information was processed with the best knowledge of the manufacturer and it is for information only.