

## Timberfill<sup>®</sup>

### Description:

Timberfill<sup>®</sup> filament is 3D printing material used for FFF (also known as FDM) technology. The input material is composed of different types of bioplastics and natural fibres obtained from wood. It is 100% bio-based and biodegradable in anaerobic conditions and in water.

This material excels by high mechanical resistance and hardness. It offers great printing properties, layer adhesion and interesting surface appearance. The models printed from Timberfill filaments have real look of wood.

The material can be used for production of electrical and electronic equipment. It doesn't contain the restricted substances. The use of the material in the food industry is not recommended.

For filaments with fillers, Fillamentum guarantees dimensions within the tolerance +/- 0,10 mm, which are strictly controlled throughout production. It is recommended to use the nozzle of 0,5 mm in diameter.

**Note:** The colour tone can have a slight inaccuracy due to natural origin of the material.



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.

Physical properties	Typical Value	Test Method	Test Condition
Material density	1,26 g/cm <sup>3</sup>		20 °C
Melt volume index	25 cm <sup>3</sup> /10 min	ISO 1133	190 °C, 2,16 kg
Diameter tolerance	± 0,10 mm		
Weight	750 g of filament (+ 250 g spool)		
Mechanical properties	Typical Value	Test Method	Test Condition
Tensile strength	39 MPa	ISO 527	at break, 5 mm/min
Elongation at break	2 %	ISO 527	5 mm/min
Tensile modulus	3200 MPa	ISO 527	1 mm/min
Charpy impact strength	22 kJ/m <sup>2</sup>	ISO 179/1eU	23 °C, unnotched
Hardness	77 Shore D	ISO 7619	
Thermal properties	Typical Value	Test Method	Test Condition
Melting temperature	145-160 °C		
Heat distortion temperature	48 °C	ISO 75	method B, 0,45 MPa
Printing properties	Typical Value	Test Method	Test Condition
Print temperature	150-170 °C	Recommended settings! It may differ according to the printer and the object.	
Hot pad	50-60 °C	Try your own settings before printing.	
Bed adhesive	Magigoo, glue stick		