

Timberfill

Description:

Fillamentum Timberfill 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 printing easily, that it allows a high quality of printing even in tricky details and an excellent lamination of the printed object.

Timberfill filament is made of biodegradable material based on wood. The material exhibits similar mechanical features as ABS or PLA and models printed with this material have a genuine appearance of wood. We recommend using a 0,5 mm nozzle. Fillamentum guarantees high precision of filament dimensions within the tolerance +/- 0,1 mm, which is strictly controlled throughout the production.

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



Physical properties	Typical Value	Test Method	Test Condition
Material density	1,28 g/cm ³	ISO 1183	
Melt volume index	20 cm ³ /10 min	ISO 1133	190 °C, 2,16 kg
Diameter tolerance	± 0,01 mm		
Weight	750 g of filament (+ 250 g spool)		

Mechanical properties	Typical Value	Test Method	Test Condition
Tensile strength	33,3 MPa	ISO 527	
Tensile modulus	2800 MPa	ISO 527	
Elongation at break	2,87 %	ISO 527	
Charpy impact strength	15,1 kJ/m ²	ISO 179	23 °C
Charpy impact strength	2,8 kJ/m ²	ISO 179	23 °C, notched
Ball indentation hardness	105 MPa	ISO 2039	

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	20-30 mm/s		

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.