

Technical Data Sheet

Timberfill

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

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

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

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

Properties	Typical Value	Test Method	Test Condition
Print temperature	170–185 °C		
Hot pad	40–50 °C		
Speed of printing	20–30 mm/min		