Technical Data Sheet 10.24

LumberLay Cork

azurefilm

Description

LumberLay is a unique material that has the **look and feel of real wood**. LumberLay combines **40% of recycled wood** and 60% of PLA filament. Because of this mix, your prints will have the **appearance of natural wood**, and the physical properties of the product will be extremely similar to natural wood.

The only downside of this filament is that it tends to wear the nozzle due to its structure. That's why **we recommend using at least a 0.6 mm abrasion-resistant nozzle**.

Typical properties

	Standard	Value	Unit
Specific gravity	ISO 1133	0.95	g/cc
Melt flow rate	ISO 1133	5.5	cm^3/10 min
Melting temp.	ISO 294	>210	°C
Heat deflect. temp.	ISO 75	85*	°C

Typical properties (3D printed)

	Standard	XY Value	XZ Value	ZX Value	Unit
Tensile Strength	ISO 527-2	25.6	30.2	13.4	MPa
Yield Strength	ISO 527-2	24.1	27.5	13.2	MPa
Tensile Modulus	ISO 527-2	2100	2300	1800	MPa
Strain at Yield	ISO 527-2	4.1	5.5	0.7	%
Flexural Strength	ISO 178	50.5	54.6	2.7	MPa
Flexural Modus	ISO 178	2400	2800	1600	MPa
Impact Strength	ISO 179	19.5	/	/	kJ/m^2

All specimens were printed with 100% infill, 2 shells and a layer height of 0.2mm

Printing recommendations

	Standard	Value	Unit
Printing temp.	AF	>220	°C
Bed temp.	AF	60	°C
Printing speed	AF	≤200	mm/s
Cooling	AF	100	%
Bed surface	/	Textured PEI	/

