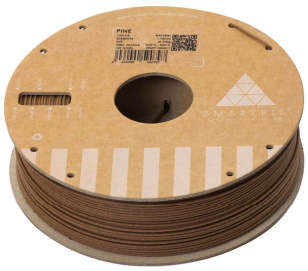
TECHNICAL DATA SHEET VERSION 1.1

PINE

It is a PLA filament with a high load of pine wood fibers, it is biodegradable and compostable. Thanks to the wood particles the surface finish of the pieces is similar to natural wood. This results in a nice colour and organic feel.

Recommended for decoration, prototyping, design, and pieces that require an aesthetics and feel similar to wood.



Reciclable Recyclable Recyclable

Compostable compostable compostables

Biodegradable Biodegradable Biodégradable

	TIPICAL VALUE		UNITS	TEST METHOD
PHYSYCAL PROPERTIES				
Chemical Name	Compound PLA with pine wood.			
Material Density	1.09		g/cm^3	ISO 1183
MECHANICAL PROPERTIES (1)	**AXIS XY**	**AXIS XZ**		
Tensile Strength	32.4	12.8	MPa	ISO 527
Tensile Modulus	2944	1841	MPa	ISO 527
Flexural Strength	65.2	23.8	MPa	ISO 178
Flexural Modulus	3304	1737	MPa	ISO 178
Elongation at break	1.2	0.8	%	ISO 178
Charpy Impact (notched, 23˚C)	-	-	kJ/m^2	ISO 179
Hardness	85.2		Shore D	ISO 7619 – 1

(1) Values obtained on printed specimens, 0.6 mm nozzle, 100% rectilinear infill, 0.2 mm layer height for more information contact us by email at info@smartmaterials.com or visit our website www.smartmaterials3d.com

PRINTING PROPERTIES		
Print Temperature	200 – 230	˚C
Hot Pad	40 – 60	˚C
Fan Layer	100	%
Print Speed	25 – 50	mm/s
Flow	100	%
Layer Height	≥ 0.2	mm
Recommended Nozzle Size (Brass)	≥ 0.6	mm

SIZE	NET WEIGHT	GROSS WEIGHT	DIAMETERS	COLOR	PACKAGING
M	750 g	1065 g	1.75 mm/2.85 mm	Natural	Carton box, carton spool, vacuum bag, desiccant bag.

USE RECOMENDATIONS

HEATED BASE RECOMMENDATIONS

It is recommended to maintain a stable temperature during printing, for printers without a heated bed, the use of adhesive tape or lacquer for 3D printing is recommended to achieve better adhesion with the base