## TECHNICAL DATA SHEETVERSION 1.1



## **OLIVE**

It is a PLA filament with a high wood load obtained from the olive bone, 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.











	TIPICAL V	ALUE	UNITS	TEST METHOD				
PHYSYCAL PROPERTIES								
Chemical Name	Compound	Compound of PLA with wood from olive bone.						
Material Density	1.11		g/cm³	ISO 1183				
MECHANICAL PROPERTIES (1)	AXIS XY	AXIS XZ						
Tensile Strength	35.8	15.5	MPa	ISO 527				
Tensile Modulus	2771	2200	MPa	ISO 527				
Flexural Strength	71.6	35.4	MPa	ISO 178				
Flexural Modulus	3102	2260	MPa	ISO 178				
Elongation at break	1.5	0.9	%	ISO 178				
Charpy Impact (notched, 23°C)	-	-	kJ/m²	ISO 179				
Hardness	82		Shore D	ISO 7619 - 1				

<sup>(1)</sup> 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.



DISCLAIMER: The information provided in the data sheets is intended to be just a reference. It should not be used as design or quality control values. Actual values may differ significantly depending on the printing conditions. The final performance of the printed components does not only depend on the materials, also the design and printing conditions are important.

Smart Materials assumes no responsibility for any damage, injury or loss produced by the use of its filaments in any particular application.