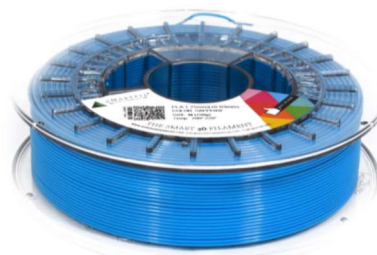


PLA

It is a biodegradable filament and for all printers, with which we can print easily, since it has no contractions allowing, in this way, to manufacture large pieces. With our PLA filament you can get a great finish and bright colors in our pieces.



Biodegradable



Compostable



Allow for all printers



Food Approved



	VALUES	UNIT OF MEASUREMENT	STANDARD
PHYSICAL PROPERTIES			
Chemical name	Polylactic acid		
Density	1,24	g/cm ³	ASTM D792
MECHANICAL PROPERTIES ¹			
	XY PLANE	ZX PLANE	
Tensile strength	55,5	43,8	MPa
Traction module	4635,7	3129,8	MPa
Flexion strength	107	18	MPa
Flexion module	3189,7	2467,1	MPa
Elongation at maximum effort	1	1,4	%
Tensile elongation (until breakage)	1,1	1,4	%
Elongation by flexion at break	5,2	1,8	%
Charpy Impact Force (non-notched)	17,5	7	kJ/m ²
Hardness	85		Shore D

⁽¹⁾ Values obtained on printed specimens, nozzle 0,4 mm, rectilinear infill 100%, layer height 0,2 mm. For more information please contact us by email at info@smartmaterials3d.com or visit our website www.smartmaterials3d.com

THERMAL PROPERTIES			
Glass transition temperature (Tg)	60	°C	ISO 11357
VICAT B (50 N 50°C/h)	59	°C	ISO 306
HDT B (0,45 MPa)	60	°C	ISO 75

PRINTING PROPERTIES			
Printing temperature	200 – 220	°C	
Bed temperature	40 – 60	°C	
Layer fan	100	%	
Material flow	100	%	
Layer height	≥ 0,1	mm	
Nozzle recommendations	≥ 0,2	mm	
Print speed	30 – 50	mm/s	

SIZE	NET WEIGHT	GROSS WEIGHT	DIAMETER	COLOR	PACKAGING
S	330 g	465 g	1,75 mm	Several	SmartBag, security seal, desiccant bag.
M	750 g	975 g	1,75 mm/2,85 mm	Several	
L	1000 g	1130 g	1,75 mm/2,85 mm	Several	

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