

## PLA SILK

It is a biodegradable filament and for all printers, with which we can print easily, since it does not have lasting contractions, in this way, to manufacture large-sized parts. With our PLA SILK filament you can achieve a great metallic or silky finish.



Recyclable  
Recyclable  
Recyclable



Biodegradable  
Biodegradable  
Biodegradable



Compostable  
compostable  
compostables

	TYPICAL VALUE	UNITS	TEST METHOD
<b>PHYSICAL PROPERTIES</b>			
Chemical Name	Pollilactic Acid		
Material Density	1.24	g/cm <sup>3</sup>	ISO 1183
<b>MECHANICAL PROPERTIES <sup>1</sup></b>			
	AXIS XY	AXIS XZ	
Tensile Strength	55.5	43.8	MPa
Tensile Modulus	4635.7	3129.8	MPa
Flexural Strength	107	18	MPa
Flexural Modulus	3189.7	2467.1	MPa
Elongation at break	1.1	1.8	%
Charpy Impact (notched, 23°C)	-	-	ISO 179
Hardness	85.4		Shore D
			ISO 7619 – 1
<b>THERMAL PROPERTIES</b>			
Thermal bending temperature	-	°C	ASTM E2092
<b>PRINTING PROPERTIES</b>			
Print Temperature	200 – 220	°C	
Hot Pad	0 – 60	°C	
Fan Layer	50 – 80	%	
Print Speed	25 – 35	mm/s	
Flow	100	%	
Layer Height	-	mm	
Recommended Nozzle Size (Brass)	-	mm	

<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](mailto:info@smartmaterials.com) or visit our website [www.smartmaterials3d.com](http://www.smartmaterials3d.com)

SIZE	NET WEIGHT	GROSS WEIGHT	DIAMETERS	COLOR	PACKAGING
M	750g	975 g	1.75 mm/2.85 mm	Various colors	SmartBag, polycarbonate spools, desiccant bag.

**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.

