IDENTIFICATION OF THE MATERIAL

Trade name	PLA Silk+
Chemical name	Polylactic acid
Chemical family	Thermoplastic polylactic acid
Use	3D printing
Brand	3dcolors
Extrusion	Made in China
Source	American imported high quality raw materials

GUIDELINE FOR PRINT SETTINGS - Settings are based on a 0.4 mm nozzle

Nozzle temperature	200 ± 10 °C
Bed temperature	0 - 65 °C
Bed modifications	Tape or glue below 60 °C
Active cooling fan	Yes; 100%
Layer height	0.08 - 0.2 mm
Layer thickness	0.4 - 0.8 mm
Print speed	20 - 100 mm/s

MATERIAL PROPERTIES

		Test Method
Melt temperature	155 - 170 °C	ASTM D3418
Glass transition temperature	~ 60 °C	ASTM D3418
Density	1.24 g/cm³	ASTM D1505
Odor	Odorless	/
Solubility	Insoluble in water	/

Think it, make it!

IDENTIFICATION OF THE MATERIAL

Bending strenght	67 Mpa
Tensile strenght	58 Mpa
Impact strenght	5.0 KJ/m²
Elongation at break	300%
Heat distortion temperature	67 °C

FILAMENT SPECIFICATIONS AND TOLERANCE

Diameter 1.75	1.75 ± 0.02 mm
Max. roundness deviation 1.75	± 0.05 mm
Net weight on reel	1000 g ± 2%

LIST OF COLORS	CERTIFICATIONS/APPROVALS
Pink	RoHS Directive (EU) 2015/863 - SGS Approved
Orange	RoHS Directive (EU) 2015/863 - SGS Approved
Red	RoHS Directive (EU) 2015/863 - SGS Approved
Yellow	RoHS Directive (EU) 2015/863 - SGS Approved
Green	RoHS Directive (EU) 2015/863 - SGS Approved
Lime	RoHS Directive (EU) 2015/863 - SGS Approved
Dark Yellow	RoHS Directive (EU) 2015/863 - SGS Approved
Jacinth	RoHS Directive (EU) 2015/863 - SGS Approved
Light Blue	RoHS Directive (EU) 2015/863 - SGS Approved
Cyan	RoHS Directive (EU) 2015/863 - SGS Approved
Blue	RoHS Directive (EU) 2015/863 - SGS Approved
Violet	RoHS Directive (EU) 2015/863 - SGS Approved
Purple	RoHS Directive (EU) 2015/863 - SGS Approved
White	RoHS Directive (EU) 2015/863 - SGS Approved
Grey	RoHS Directive (EU) 2015/863 - SGS Approved