

PLA · Technical Data Sheet

General Features

Chemical Name Polylactic acid	Benefits • Ideal ABS substitute for many tasks • Very low shrinkage	Main Applications Precise detail, good adhesion to build plates, less warping or curling.
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Filament Characteristics

Diameter	Ø 1.75mm	Ø 2.85mm
Meters per spool	251.462m	94.811m
Weight per meter	2.98g	7.91g
Tolerance	±0.02mm	±0.03mm

Material Properties

		Typical value	ASTM Method
Tensile Yield Strength	psi (MPa)	8700 (60)	D 882
Tensile Strength at Break	psi (MPa)	7700 (53)	D 882
Tensile Modulus	psi (MPa)	524,000 (3.6)	D 882
Tensile Elongation	%	6	D 882
Notched Izod Impact	ft-lb/in (J/m)	0.3 (16)	D 256
Flexural Strength	psi (MPa)	12,000 (83)	D 790
Flexural Modulus	psi (MPa)	555,000 (3.8)	D 790
Heat Distortion Temperature, 66 psi (0.45 MPa)	°C	55	E 2092
Specific Gravity	g/cc	1.24	D 792
MFR	g/10 min	6	D 1238
Relative Viscosity	-	4.0	D 5225
Clarity	-	Transparent	-
Peak Melt Temperature	°C	145-160	D 3418
Glass Transition Temperature	°C	55-60	D 3418

Recommended printer settings

Print temperature	200±5°C
Print bed temperature	50±5°C
Cooling fans	On except first layer
Closed environment	Not Required
Adhesive	Required

Available Colours

Colour	
White	Red
Gray	Orange
Black	Blue

Disclaimer:

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