

Technical Data Sheet Plexiwire PLA

Description

Plexiwire PLA is a PLA 3D printing filament for FDM/FFF printers, available in 400m, 300m and 100m spools in 8 colors.

Material Properties

Specific Gravity	1.24 g/cm ³	D 792
MFR (210°C, 2.16kg)	6 g/10min	D 1238

Mechanical Properties

Tensile Strength at Break	53 MPa	D 882
Tensile Yield Strength	60 MPa	D 882
Tensile Modulus	3.5 Gpa	D 882
Tensile Elongation	6,00%	D 882
Notched Izod Impact	16 J/m	D 256
Flexural Strength	83 MPa	D790
Flexural Modulus	3.8 MPa	D790

Thermal Properties

Heat Distortion Temperature	55°C	E 2092
Glass Transition Temperature	55-60°C	D3418

Guideline for print settings*

Nozzle temperature	185-215°C
Bed temperature	40°- 60°C
Active cooling fan	YES (up to 100%)
Layer height**	0.05 - 0.30 mm
Shell thickness**	0.40 - 2.70 mm
Print speed**	40-150 mm/s
Closed chamber	not necessary
Dry box	not necessary
Ruby or hardened nozzle	not necessary

* settings are based on a 0,4 mm nozzle

** depending on the geometrical complexity

Filament Specification

Nominal diameter	1,75mm
Diameter tolerance	+ - 3%
Ovality	>= 97%
Available colors	white, black, yellow, green, red, blue, orange, grey
Netto filament weight	400m = 1.2kg +-5%, 300m = 0.9kg +-5%, 100m = 0.3kg +-5