

Technical Data Sheet Plexiwire PCTG

Description

Plexiwire PCTG is a polycyclohexylene dimethylene terephthalate or glycol modified copolyester 3D printing filament for FDM/FFF printers, available in 200m and 100m.

Material Properties

Specific Gravity	1.23 g/cm ³	ASTM D792
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Mechanical Properties

Tensile Stress at Yield	44 MPa	ISO 527
Tensile Stress at Break	46 MPa	ISO 527
Elongation at Break	220%	ISO 527
Elongation at Yield	4,4%	ISO 527
Flexural Strength	60 MPa	ISO 178
Flexural Modulus	1600 MPa	ISO 178
Izod Impact Strength, Notched @ 23°C	93°C KJ/m ²	ISO 180

Guideline for print settings*

Nozzle temperature	230-255°C
Bed temperature	50-70°C
Active cooling fan	YES (up to 100%)
Layer height**	0.05 - 0.30 mm
Shell thickness**	0.40 - 2.70 mm
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%
Netto filament weight	400m = 1.2kg +-5%, 300m = 0.9kg +-5%, 200m = 0.6kg +-5% 100m = 0.3kg +-5%