



3D Printing Filament

TECHNICAL DATA SHEET - PRO Series PLA

Commercial Name: MatterHackers PRO Series PLA

Designation: 3D Printing Material

Manufacturer: MatterHackers

Product Description

MatterHackers PRO Series PLA 3D printing filament is a high-quality material made with NatureWorks 4043D Ingeo™, a polylactic acid biopolymer. Made in the USA, PRO Series PLA filament is designed to produce accurate and seamless 3D printed parts perfect for prototyping end-use parts, life-like models, or for taking your everyday 3D printing to a higher caliber.

Storage

PRO Series PLA filament should be stored between 15 - 25°C, in its original packaging, in a clean and dry environment. When following these recommended storage procedures the minimum shelf life will exceed 12 months.

Material Specifications

PROPERTY	VALUE	TEST METHOD - ISO
Tensile Strength at Break	53 MPa	ASTM D882
Tensile Yield Strength	60 MPa	ASTM D882
Tensile Modulus	3.6 MPa	ASTM D882
Notched Izod Impact	16 J/m	ASTM D256
Tensile Elongation	6%	ASTM D882
Flexural Strength	83 MPa	ASTM D790
Flexural Modulus	3.8 MPa	ASTM D790



Heat Distortion Temperature	55°C @ 0.45 MPa	ASTM E2092
Specific Gravity	1.24 g/cc	ASTM D792

Filament Specifications

PROPERTY	VALUE
Diameter 1.75mm	1.75 ± 0.05mm
Diameter 2.85mm	2.85 ± 0.05mm
Suggested Print Temperature	190°C - 230°C
Suggested Print Speed	50-90+ mm/s
Suggested Bed Temperature	60°C - 70°C
Base Resin	NatureWorks Ingeo 4043D

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