



3D Printing Filament

TECHNICAL DATA SHEET - PRO Series Nylon

Commercial name: MatterHackers PRO Series Nylon
Raw material: Nylon
Designation: 3D printing applications
Manufacturer: MatterHackers

Material Specifications

PROPERTY	VALUE	TEST METHOD - ISO
Density	1.14	ASTM D792
Melting point	5 - 15	ASTM D1238
Heat Deflection Temperature	102°C	ASTM D648 at 66 PSI
Tensile Strength	5260 Yield PSI	ASTM D638, Type IV
Tensile Elongation	34%	ASTM D638, Type IV
Flexural Modulus	366 KPSI	ASTM D790
Flexural Peak Stress	13.3 KPSI	ASTM D790
Notched Izod Impact	142 Jm-1	ASTM D256

Filament Specifications

PROPERTY	VALUE
Diameter 1.75mm	1.75 ± 0.05 mm
Diameter 2.85mm	2.85 ± 0.05 mm
Suggested printing bed material	Glass/Glue, Garolite, PEI
Suggested print temperature	240°C - 260°C
Suggested print speed	30 - 150 mm/s
Suggested bed temperature	65°C
Suggested drying temperature	75°C for 8 hours

NOTES

Nylon materials inherently take up moisture from the surrounding atmosphere due to the nature of their chemistry. If moisture is present during extrusion, degradation can occur, resulting in a weaker part. A tell-tale sign of your nylon being too wet is popping noises and visible air bubbles escaping the extrudate. We recommend drying all nylons prior to printing.