



3D Printing Filament

TECHNICAL DATA SHEET - PRO Series TPU

Commercial Name: MatterHackers PRO Series TPU

Designation: 3D printing material

Manufacturer: MatterHackers

Product Description

MatterHackers PRO Series TPU 3D printing filament exhibits excellent layer adhesion and strength while being flexible, making it a great solution for parts that require energy return and fatigue resistance. For 3D printed parts that need rubber-like qualities, like custom-fit gaskets or belts, or even prototypes for products like mouth guards and watch straps, PRO Series TPU is a functional material that can handle both intricate and tough print jobs.

Storage

PRO Series TPU 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
Hardness	95 Shore A / 48 Shore D	ASTM D2240
Tensile Strength	17.2 MPa	ASTM D412
Tensile Modulus	22.75 MPa	ASTM D412
Tensile Elongation	550%	ASTM D412
Flexural Modulus	37.2 MPa	ASTM D790
Melt Flow Index	20 cm ³ /10 min	ISO 1133 (200°C)



Vicant Softening Point	115°C	ASTM D1525
Density	1.14 g/cm ³	ASTM D792

Filament Specifications

PROPERTY

VALUE

Diameter 1.75mm	1.75 ± 0.02mm
Diameter 2.85mm	2.85 ± 0.02mm
Print Temperature	230°C ±10°C
Bed Temperature	70°C ±10°C
Material Drying Temperature	90°C (Active Drying Recommended)
Build Surface Material	PEI Recommended, Glass with glue stick

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