

3D Printing Filament PLA Pro 1.75mm



DESCRIPTION

PLA Pro Filament is a professional grade PLA 3D Printer filament, designed for superior reliability and toughness. This eco-friendly filament is compatible with most 3D printers. Significantly higher toughness and notched impact strength, make it more durable and suitable for functional prototypes and parts that require mechanical strength. PLA Pro has improved printing properties such as smoother feeding and 100% tangle-free winding for easier handling. This filament is designed to maintain stability throughout the printing process, resulting in more reliable and precise prints. PLA Pro is eco-friendly and biodegradable to meet environmental standards, while offering enhanced performance.

DISTINCTIVE FEATURES

- Food safe material
- High Precision
- No bubbles
- Low warping
- High tenacity
- High tensile strength
- Medium impact strength
- High bending strength
- Improved heat resistance
- Biodegradable
- Eco-friendly

APPLICATIONS

Ideal to use for functional prototypes and parts that require mechanical strength, This filament supports a wide range of uses across areas including education, design and development, engineering and various other industries.

PLA

1.75mm

1kg



GENERAL SPECIFICATION

Series	3D Printing Filament
Type	PLA Pro
Spool Size	1kg
RoHS	
Reach	
FDA Approved	



MATERIALS

Material	PLA
Finish	Smooth
Colour	See Part Number Table

Main Filament Property Parameters	
Filament Type	PLA Pro
Water Absorption (%) Equalibrium in water, 23°C)	<0.3
Tensile Strength (MPa)	45.5-49
Flexural Strength (MPa)	73-76
Modulus of Elasticity (MPa)	950-1050
Izod Notched Impact ((kg/m ²) Strength (IZOD, 23°C)	9.5-10.5
Elongation at Break (%)	14.5-16.5
Heat Deflection Temperature (°C) (HDT@0.455MPa (66psi))	53
Melt Flow Rate	3-6g/10min
Density	1.25-1.26g/cm ²



ENVIRONMENTAL/OPERATING SPECIFICATION

Printing Parameters	
Printing with enclosure recommended	-
Nozzle Operating Temperature °C	190-210
Bed Operating Temperature °C	50-55
Nozzle Diameter	Ø0.4/0.6mm (Ø0.4mm recommended)
Cooling Fan	50-100%
Retraction Speed	30-50mm/s
Retraction Length	1-2mm
Printing Speed	40-250mm/s
Support Materials	Self supporting, PVA, BVOH
Printing & Storage Environment, Humidity	Room temperature up to 40°C, ≤ 20% RH (sealed with desiccant)
Printable on build plate sticker	Yes
Printable on glass plate	Yes
Printable on PEI sheet	Yes
Soluble with common solvents	No
Dry Box Recommended	No
Hardened Nozzle Required	No
Pre-print processing (Drying conditions before printing)	-
Post-print processing	-



PART NUMBER TABLE

Part Number	Colour	Filament Diameter (mm ²)	EAN	UNSPSC	Country of Origin
25-0318	Black	1.75	5053556032211	23261601	China
25-0319	White	1.75	5053556032228	23261601	China
25-0327	Natural	1.75	5053556032235	23261601	China
25-0328	Grey	1.75	5053556032242	23261601	China
25-0329	Red	1.75	5053556032259	23261601	China
25-0333	Green	1.75	5053556032266	23261601	China

For further information on pricing, delivery, and long-term stock agreements please get in touch with your local business development contact, telephone our main office on **01206 838000** or email **Sales@Rapidonline.com**.

