

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

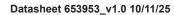
APPLICATIONS

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.













GENERAL SPECIFICATION

Series	3D Printing Filament
Туре	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 Absorbtion (%) 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/m²) 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	Colour	Filament Diameter (mm²)	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**.



Important Notice: This data sheet and its contents (the "Information") belong to Rapid Electronics Limited or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but Rapid Electronics Limited assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where Rapid Electronics Limited were aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict Rapid Electronics Limited's liability for death or personal injury resulting from its negligence.