

PLA

TECHNICAL DATA SHEET

Our PLA Medical is a bio-based, medical-grade polymer composed of high-quality Polylactic Acid [PLA]. This bone white filament is made from bio-based granules that comply with ISO 10993-5, enabling the production of 3D-printed parts that come into contact with the skin, such as surgical planning models, medical device prototypes, interfaces, and tools for functional prototyping. Supplied in spools with a diameter of 1.75 or 2.85 mm, weight 500 g.

PRODUCT IDENTIFICATION

Product	PLA – Polylactic Acid
Reference	PF-PLA
Technology	FDM -Filament deposition
Diameter	1.75 mm - 2.85 mm
Color	Bone white
Rigidity	Rigid
Sterilization	Gamma ray / EtO

ADVANTAGES

- Easy printing at low temperatures
- Low deformation
- Bio-based origin
- Matte surface finish, similar to bone

APPLICATIONS

- Anatomical and planning models
- Prototypes

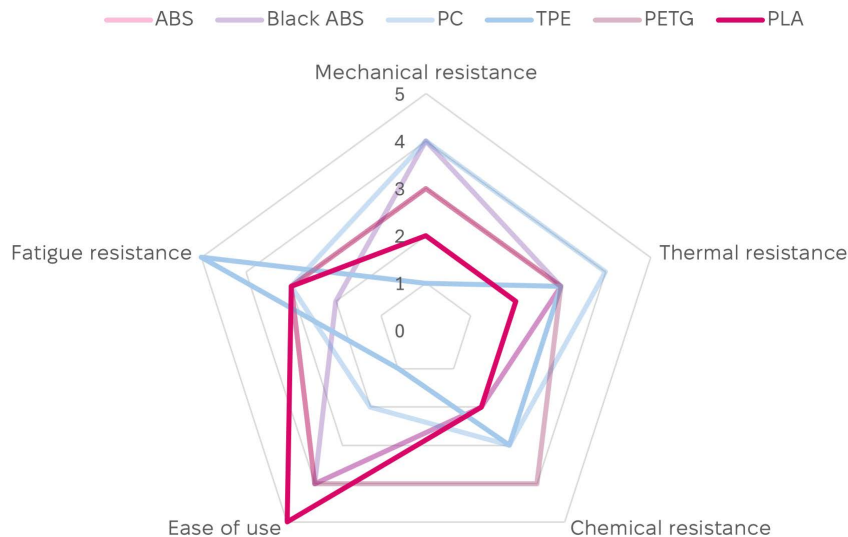
TECHNICAL PROPERTIES

Melting range (DSC, 10°C/min)	Semi-crystalline
Glass transition	55-65°C
Degradation temperature	>250°C
Maximum stress (tensile)	43 MPA
Elongation at break	32 %
Young's modulus	~ 630 MPA

PRINTING PROPERTIES

Printing temperature	210-230°C
Build plate temperature	55-65°C
Print speed	150-200 mm/s
Cooling fan speed	60-80 %

PERFORMANCE PROFILE OF OUR FILAMENTS



USE INDEX

We recommend the use of enclosed 3D printers and able to accept 2.85mm or 1.75mm filament.

Warning: The source material has been evaluated according to ISO 10993-5 (cytotoxicity) only. It is not intended for implantable use. In the event of transformation (e.g. 3D printing), the user must ensure the absence of contamination and the compatibility of the finished product with its final application.

DISCLAIMER OF LIABILITY

The values presented in this document are for reference and comparison purposes only. These data may vary according to printing conditions, materials, part design and environmental conditions, and should not be used for specification or quality control purposes.

Each user is responsible for compliance with product and employee safety standards, for use of the product, and for compliance with environmental, waste disposal and recycling regulations. Lattice Services gives no warranty, unless separately stated, as to suitability for any particular use or application.

Lattice Services shall not be liable for any damage, injury or loss resulting from the use of these materials in any application.

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