

PC

TECHNICAL DATA SHEET

PC is a medical-grade filament made from polycarbonate. This filament is made from granules that comply with ISO 10993-5 certification for skin contact, is autoclavable and can be used in the operating room for guided surgery. This amorphous thermoplastic can be used to make 3D parts for skin-contact applications, such as surgical and cutting guides, medical instruments, etc.

PRODUCT IDENTIFICATION

Product	PC – Polycarbonate
Reference	PF-PCT
Technology	FDM – Filament deposition
Diameter	1.75 mm – 2.85 mm
Color	Transparent with blue highlights
Rigidity	Rigid
Sterilization	Gamma Ray / EtO / Autoclave

ADVANTAGES

- High mechanical strength
- High thermal resistance

APPLICATIONS

- Prototyping – Research and development
- Autoclavable surgical and cutting guides
- Tubing connection components
- Medical instruments

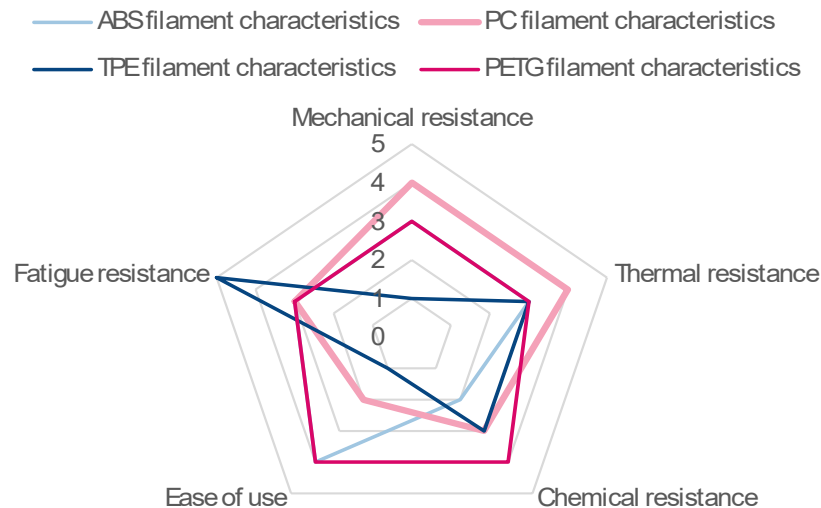
TECHNICAL PROPERTIES

Melting range (DSC, 10°C/min)	Amorphous
Glass transition	135-155°C
Degradation temperature	>300°C
Maximum stress (tensile)	60 MPA
Elongation at break	15 %
Young's modulus	~ 545 MPA

PRINTING PROPERTIES

Printing temperature	255-275°C
Build plate temperature	120-140°C
Print speed	20-40 mm/s
Cooling fan speed	0-5 %

PERFORMANCE PROFILE OF OUR FILAMENTS



USE INDEX

We recommend the use of enclosed 3D printers with a platen capable of heating to over 120°C, 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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