



Technical Data Sheet

PLCL- CAPROLACTISSE 70/30

Medical grade copolymer filament

PLA/PCL 70:30 or POLY(L-LACTIDE-CO- ϵ -CAPROLACTONE) 70:30 is a semi-crystalline, semi-transparent thermoplastic with a slightly white appearance. It resorbs within 12 to 24 months after implantation. Although crystalline, the polymer has a glass transition temperature close to room temperature, which ensures a high degree of flexibility. This material is generally used to make parietal reinforcements and nerve reconstruction



guides.

Product identification

Item nr	X
Product	PLA/PCL - 70/30 L-Lactide/Caprolactone copolymer
Reference	PF-PCL-100
Production date	X
Expiry date	X
Technology	FDM
Diameters	1.75 mm
Colours	Transparent white
Conservation	After opening the package, keep it in a dry, well-ventilated place. If possible, place the reels in a vacuum pack and protect them from humidity. Finally, if the packaging is well sealed, the coils can be placed in the refrigerator at 4°C.

Advantages

- Bioabsorbable
- Biocompatible polymer
- Souple

Applications

- Parietal prosthesis
- Meshes
- ...

Technical properties

TESTS	RESULTS
Comonomer ratio, L-lactide	70 mol%
Comonomer ratio, Caprolactone copolymer	30 mol%
Melting range (DSC, 10°C/min)	150 - 170°C
Glass transition (DSC, 10°C/min)	35 - 40°C
Degradation temperature	>250°C
Molar mass (g/mol)	100 000 - 120 000g/mol

Print properties

Printing temperature	180-230°C
Build plate temperature	Room temperature
Print Speed	20 – 60 mm/s
Cooling fan speed	60 – 100 %

Indication of use

CAPROLACTISSE 70/30 is compatible with most 3D printers equipped with a heating plate and can receive 2.85mm or 1.75mm filament.

Advice: For optimum print quality, it is advisable to dry the product in an oven for 48 hours at 40 °C. In addition, the filament is quite flexible due to a glass transition close to the ambient temperature, so it is advisable not to overheat the room where the printer is located. And avoid using too much “retraction” in the slice parameter.

Warning: In no case this product can be implanted in humans. Lattice Medical declines any responsibility for the medical use of this product

Disclaimer of liability

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

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