Technical Data Sheet

PDO– DIOXACTISSE 100

Medical grade polymer filament

PDO or Polydioxanone is a white semi-crystalline thermoplastic. It degrades quickly once implanted in 4 to 6 months. Although very crystalline, the polymer has a lower glass transition temperature than room temperature, which guarantees a certain flexibility. Thus, this material is generally used to make sutures, textile mesh, tissue engineered scaffolds …

Product identification

Item nr	X
Product	PDO 100 – Polydioxanone
Reference	PF-PDO
Production date	X
Expiry date	X
Technology	FDM
Diameters	1.75 mm – 2.85 mm
Colours	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
- Implantable
- Flexible
- Short degradation time

Applications

- Sutures
- Meshes
- …

Technical properties

TESTS	RESULTS
Melting range (DSC, 10°C/min)	95 – 110°C
Glass transition (DSC, 10°C/min)	-21°C
Degradation temperature	>240°C
Molar mass (g/mol)	140 000 – 180 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

DIOXACTISSE 100 is compatible with most 3D printers equipped with a heating plate and can receive 2.85mm or 1.75mm filament.

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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