



# Technical data sheet

## TPE

The TPE is a flexible medical grade filament made of thermoplastic elastomer. This filament is made from granules with ISO 19993-5 certification. This thermoplastic has a shore of 88A which will make it possible to make flexible 3D parts such as orthopedic devices and contact parts in interface with rigid parts of orthoses or prostheses.



### Identification of the product

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Product	TPE - ThermoPlastic Elastomer
Reference	PF-TPE
Technology	FDM - Filament Deposition
Diameters	1.75 mm
Color	White
Rigidity	Flexible
Sterilization	Gamma ray / EtO

#### Benefits

- Extremely flexible
- Great resistance to shocks

#### Applications

- Orthopedic devices
- Flexible surgical models

### Technical properties

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TESTS	SECURITIES
Blending range	150-165°C
Glass transition	< ambient T°
Degradation temperature	>250°C
Maximum train (traction)	12 MPA
Elongation at break	1600 %
Shore hardness	88 A

## Print properties

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Printing temperature	220-240°C
Tray temperature	40 - 60°C
Print speed	10-40 mm/s
Cooling fan speed	50 - 100 %

## Indication for use

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The TPE is compatible with most 3D printers equipped with a heating bed and can receive 1.75mm filament. However, we recommend the use of a printer equipped with a direct drive system.

**Warning:** Under no circumstances can this product be implanted in humans. Lattice Services assumes no responsibility for the medical use of this product.

## Disclaimer

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

Each user is responsible for compliance with the safety standards of the product and its employees, its use, respect for the environment, waste disposal and recycling rules. Lattice Services makes no warranty, unless separately stated, as to fitness for any 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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