# GLYCOLACTISSE PLGA 85/15 TECHNICAL DATA SHEET



PLGA 85:15 POLY(LACTIC-CO-GLYCOLIC ACID) is a transparent, slightly golden, amorphous thermoplastic that resorbs within 12 to 24 months once implanted. The polymer is fairly rigid, as it is above the glass transition at room temperature. This material is currently used for bone implants and tissue engineering.

#### PRODUCT IDENTIFICATION

Product	PLGA - 85/15 L-Lactide/Glycolide copolymer
Reference	PF - PGA
Technology	FDM -Filament deposition
Diameters	1.75 mm - 2.85 mm
Color	Transparent - Slightly golden
Storage	After opening, store in a dry, ventilated place. Vacuum-pack coils in a dry place. If hermetically sealed, store in a refrigerator at 4°C.

#### **ADVANTAGES**

- · Bioresorbable
- · Biocompatible
- · Implantable\*
- · Ease of use

#### **APPLICATIONS**

- · Bone implant
- · Orthopedic screw

# **TECHNICAL PROPERTIES**

Melting range (DSC, 10°C/min)	150-160°C
Glass transition	60-65°C
Degradation temperature	>250°C
Maximum tensile stress	55 MPA
Elongation at break	6 %
Young's modulus	~ 1.5 GPA
Molar mass	80,000 - 100,000 g/ mol

# **PRINTING PROPERTIES**

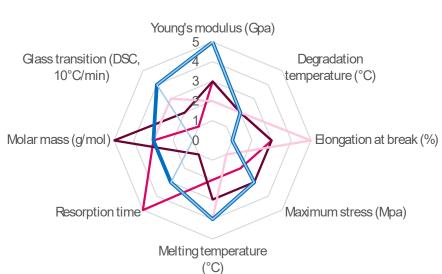
Printing temperature	180-230°C
Build plate temperature	50-70°C
Print speed	10-90 mm/s
Cooling fan speed	60-100 %

<sup>\*</sup>The implantability of the filament depends on compliance with the regulatory process in force in the customer's country.

## PERFORMANCE PROFILE OF OUR FILAMENTS







### **USE INDEX**

**GLYCOLACTISSE** 85:15 compatible with 3D equipped is most printers can adhere filament. with a heated bed and to 2.85 mm or 1.75 mm

For optimal print quality, it is recommended to dry the product in an oven for 48 hours at 40°C.

Warning: This product, in its current state, is not intended for human implantation. Any transformation, in particular 3D printing, breaks traceability and invalidates the biocompatibility assessment carried out on the original material. It is the user's responsibility to demonstrate the absence of contamination and to carry out a complete regulatory assessment of the biocompatibility of the final device. Lattice Services declines all responsibility in the event of use for medical or implantable purposes.

# **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.

# **Contact**

Lattice Services 09 73 79 84 12 Contact@lattice-services.com 80 rue du Docteur Yersin, 59120, Loos, France