

PLGA-HA

TECHNICAL DATA SHEET

PLGA/HA is an amorphous, ivory-colored thermoplastic that resorbs within 12 to 24 months once implanted. Our filament consists of 90% polylactic-co-glycolic acid (PLGA) and 10% hydroxyapatite (HAP). This innovative composition combines the resorption properties of PLGA with a natural component of bone, hydroxyapatite, thus enhancing osteoconductivity, making it an ideal filament for bone reconstruction applications.

PRODUCT IDENTIFICATION

Product	90% PLGA (polylactic-co-glycolic acid) + 10% HAP (hydroxyapatite)
Reference	PF-PGH
Technology	FDM - Filament deposition
Diameters	1.75 mm - 2.85 mm
Color	Ivory
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

**The implantability of the filament depends on compliance with the regulatory process in force in the customer's country.*

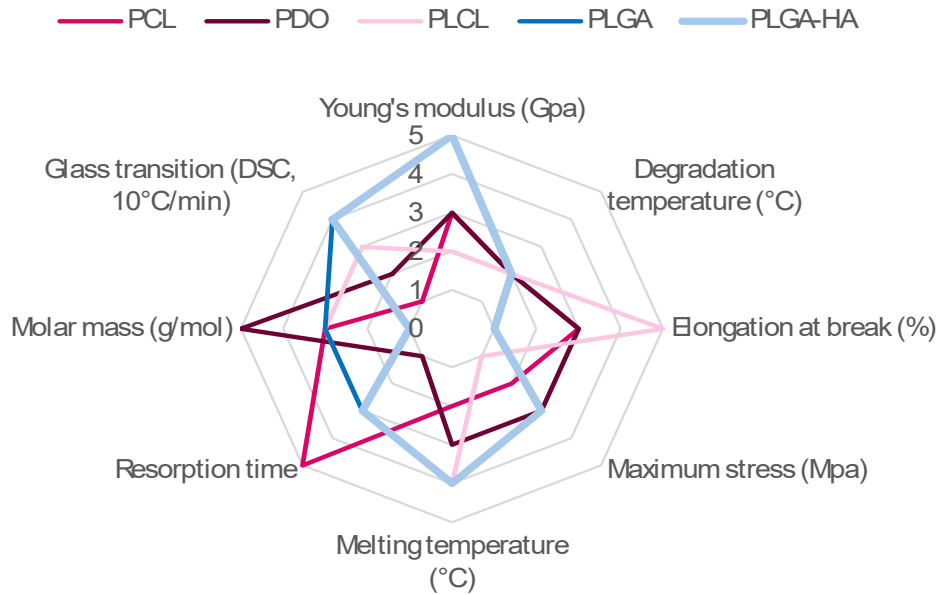
TECHNICAL PROPERTIES

Melting range (DSC, 10°C/min)	155-165°C
Glass transition	52-57°C
Degradation temperature	>250°C
Maximum tensile stress	45 MPA
Elongation at break	3 %
Young's modulus	~ 1,6 GPa
Molar mass	25,000 - 35,000 g/mol

PRINTING PROPERTIES

Printing temperature	210-230°C
Build plate temperature	55-65°C
Print speed	10-90 mm/s
Cooling fan speed	100 %

PERFORMANCE PROFILE OF OUR FILAMENTS



USE INDEX

PLGA/HA filament (diameter 1.75 mm) is compatible with most hot-platen 3D printers, provided the material adheres well to the print substrate.

We recommend using a nozzle with a minimum diameter of 0.4 mm to avoid any risk of clogging. For optimum print quality, we recommend drying 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.

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