

TECHNICAL DATA SHEET

Physical Property	Value	Unit	Test method according to
Material density	1,030	g/cm ³	ISO 1183
	1030,000	kg/m ³	ISO 1183
Melt flow rate (230°C/2, 16kg)	12	g/10min	ISO 1133

Mechanical Property	Value	Unit	Test method according to
Tensile strength	65	MPa	DIN 53504-S2
Elongation at break	3	%	DIN 53504-S2
MEF Flexural Modulus Elasticity	3400	MPa	ISO 178
Notched impact strength (Charpy)n at +23°C	5	kJ/m ²	ISO 179

Thermal Property	Value	Unit	Test method according to
HDT (0,45MPa)	155	°C	ISO 75-2

Description

PP GLASS FIBER is a high flow polypropylene specially designed for FFF and FGF 3D printing technologies. It has glass fiber as a reinforcing component. It exhibits high stiffness, while maintaining good impact strength in all temperature ranges. It also exhibits low shrinkage deformation. This grade is UV stable. Recyclable.

Applications

PP GLASS FIBER is specifically indicated for 3D Printing Filament in which the main requirement is high mechanical strength together with excellent processability and stability of the constructed part, such as:

- Automotive: prototypes, aesthetic parts, specific tools or tools, etc.
- Aerospace: prototypes.
- Technical components: toys, textiles, footwear, jewelry, leisure, etc.

PP·GF complies with the European Directives regarding materials intended for contact with foodstuffs. The product mentioned herein is not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications. For further information, please contact us.

Storage

PP·GF should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 60°C. Storage under inappropriate conditions could initiate degradation processes or undesired migration of additives included in its formulation which may have a negative influence on the processability and properties of the transformed product.

Printing settings

Printing Properties	Recommended
Printing temperatures	240-260°C
Printing speed	30-60mm/s
Hot-bed temperature	50-60°C
Optimal layer height	0,2 mm
Minimal nozzle	0,4 mm - 0,6 mm (recommended)
Retractions	2-3 mm (speed 40mm/s)
Nozzle	Hardened steel or ruby steel (avoid brass) of 0.50 mm and never smaller, to avoid clogging of the extruder.

Instructions to use 3D primer for PP filament

Follow the instructions below for using the 3D primer with the PP filament:

- 1° Open the primer bottle and apply it in the printing area.
- 2° Wait about **5 min** before printing to let the primer dry.
- 3° Set bed temp to **40°C** (not more temperature if not the part will warp).
- 4° When the part is finished, heat up the bed up to **85°C** to release the printed part.