

TEHNNICAL DATA SHEET

PETGFORCE

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Product description:

PETGFORCE is a fiber composite filament made by blending PETG with a mixture of glass and carbon fibers. This combination offers superior mechanical properties, including increased stiffness, dimensional stability, and enhanced thermal and chemical resistance. It is ideal for applications requiring strong, lightweight parts with excellent structural performance and durability.

Storage:

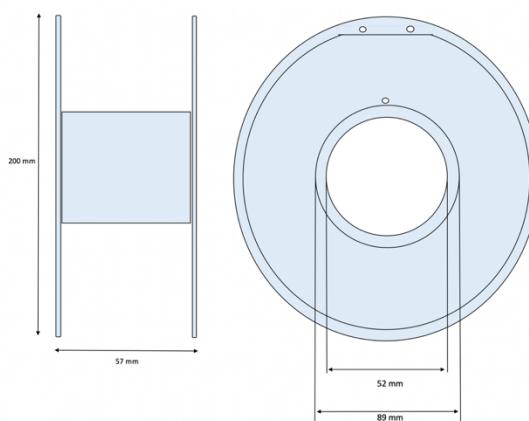
Store in dry area, in a closed container away from moisture.

Use desiccant bags to prevent moisture absorption, as PETG is slightly hygroscopic.

PRODUCT PARAMETERS

Parameter	Value
Filament diameter [mm]	1.75
Diameter tolerance [mm]	+/- 0,01
Oval tolerance [mm]	+/- 0,01

Spool dimensions [mm] (ø / height / hole ø)	200/57/52
Spool weight [g]	204
Spool material	Transparent SAN
Weight with packaging [g]	1 550
Net weight [g]	1 000
Box dimensions [mm]	203/207/70



RECOMMENDED PRINTING PARAMETERS

Parameter	Value
Print temperature [°C]	240-280
Bed temperature [°C]	80-110
Cooling [%]	Low or off
Closed chamber	Not required, but may improve print
Chamber temperature [°C]	30-60
Printing Speed [mm/s]	30-60
Nozzle type	Hardened steel or ruby

PHYSICAL PARAMETERS OF THE MATERIAL

Parameter	Value	Unit	Test method
Density	1,37	g/cc	ISO 1183
Melt flow rate	NB	g/10min	ISO 1133 220°C/10Kg
Vicat softening temp.	90-105	°C	ISO 306 VST/A/50 (50°C/h,10N)
Tensile modulus	4500	MPa	ISO 527 1mm/min
Tensile strength	70-90	MPa	ISO 527 @Yield 50mm/min (2inch/min)
Elongation at break	3-5	%	ISO 527 @Break 50 mm/min (2inch/min)
Impact strength	80	J/m2	ISO 179 Charpy Notched @23°C (73°F)

The values above have been measured using standard test specimens made of non-colored material at room temperature. The figures should be considered as indicative values only. Actual properties of PETGFORCE parts can be affected by the printing parameters, design of the model, ambient conditions, application of the printout etc. It is essential that users test our products to determine whether they are suitable for their intended use.