



APPLICATIONS

PETG-CARBON500 ARMOR is characterized by its high tensile modulus up to 4700 MPa giving good mechanical properties. Polyethylene Terephthalate glycolated is characterized by a low rigidity allowing a high carbon rate to produce a less brittle filament. The printed parts, extremely resistant can be sanded and worked by standard post-printing processes.

The optimized formula give less fragile filament compared to the majority of the carbon reinforced 3D thermoplastics usually available on the market. Print settings are compatible with most 3D printers with heating plate. **Advantage: Relief parts and mechanical reinforcement.**

[More information](#)

HEALTH & SAFETY

PETG-CARBON500 ARMOR filaments are not hazardous for health. However, as short fibers and dust, in case of peeling or sanding, ABS filament may cause skin, eyes and respiratory tract irritation. Moreover, the low size of fibers can cause sometimes allergies. Users must wear individual protection equipment (mask, gloves...) in case of sanding or milling the printed pieces. Consult MSDS for more data.

PETG can lead to COV production during printing process. Ensure a working area equipped with air extraction or suitable protection. Always refers to MSDS prior handling.

[More information](#)

Featured Object: Carabiner



PETG-CARBON500 ARMOR available in 2 diameters

Packaging



Spools packed in individual boxes, under vacuum with desiccant. Product supplied with batch number and material traceability. Spools of 300g, 750g and 2.2kg are available on our store. Other spools are available on request (up to 25 kg).

Product Information	Units	Method	Result
Printing Temperature	[°C]	-	240 - 260
Platform Temperature	[°C]	-	80 - 100
Nozzle	[mm]	-	0.5 (>0.4)
Printing Speed	[mm/s]	-	70
Linear Weight Ø 1.75	[g/m]	-	3.2
Linear Weight Ø 2.85	[g/m]	-	8.5
Thermal and Mechanical Properties	Units	Method	Result
Tg	[°C]	-	85
DTUL	[°C]	-	80
Flammability	[UL 94@1.6mm]	-	HB
Density	[g/cm³]	ISO 1183	1.08
Tensile Modulus	[Mpa]	ISO 527	4 700
Flexural Modulus	[Mpa]	ISO 178	3 800
Elongation at Break	[%]	ISO 527	2
Stress at Break	[Mpa]	ISO 527	42
Charpy	[kJ/m²]	-	20
Filler	Units	Norms	Result
Mean Length	µm	-	251
Mono Fiber Diameter	µm	-	7 +/- 2
Fibers > 100 µm	%	-	70
Fibers Population	Unit/g of filament	-	9 x E6