

PET-GF

INDUSTRIAL GRADE MATERIALS FOR FDM 3D PRINTING



MATERIAL NAME

PET-GF

COLOR

White

PROCESS

FDM

PRODUCT DESCRIPTION

PET-GF is a high-performance engineering plastic based on a PET matrix reinforced with glass fibers. It offers outstanding mechanical strength, heat resistance, dimensional stability, and wear resistance. Widely used in fields demanding high strength and thermal stability, such as automotive, electrical appliances, machinery, and electronics.

TYPICAL APPLICATIONS

- The automotive industry
- Electronic appliances
- Industrial and mechanical components

PRODUCT SAFETY

Engineering plastics are fine to touch under normal circumstances, but a very small number of people may have allergic reactions to the additives in them. When melted at high temperatures, irritating gases may be released.

PRODUCT DELIVERY & WAREHOUSING

- **GOOD RESISTANCE**

Good resistance to many acids, bases, oils.

- **WEAKNESSES**

May be attacked by some chlorinated hydrocarbons, ketones and esters. Strong bases may cause PC to hydrolyze.

MATERIAL PROPERTIES

Properties	Test Method	Value
Hardness	/	/
Flexural modulus (Mpa)	ISO 178	XY: 3650.32 ± 65.81 MPa
Flexural strength (Mpa)	ISO 178	XY: 114.87 ± 3.0 MPa
Tensile modulus (Mpa)	ISO 527	XY: 4130.13 ± 107.0 MPa Z: 3322.37 ± 94.04 MPa
Tensile strength (Mpa)	ISO 527	XY: 70.86 ± 2.86 MPa Z: 33.95 ± 2.38 MPa
Elongation at break	ISO 527	XY: 2.56 ± 0.3 % Z: 1.14 ± 0.11 %
Poisson's Ratio	/	/
Impact strength notched Izod (J/m)	ISO 179-1	6.56 ± 0.68 KJ/m ²
Heat deflection temperature (°C)	ISO75	HDT @0.45 MPa: 75.9°C HDT @1.8 MPa: 71.9°C
Glass transition,Tg (°C)	/	/
Coefficient of thermal expansion(/°C)	/	/
Density (g/cm ³)	/	1.38 g/cm ³

Tips: Want to explore a wider range of materials? Check out <https://www.unionfab.com/materials>



www.unionfab.com

China's Largest 3D Printing Manufacturing Company for
Rapid Prototyping and On-Demand Production Parts.

Email: hello@unionfab.com