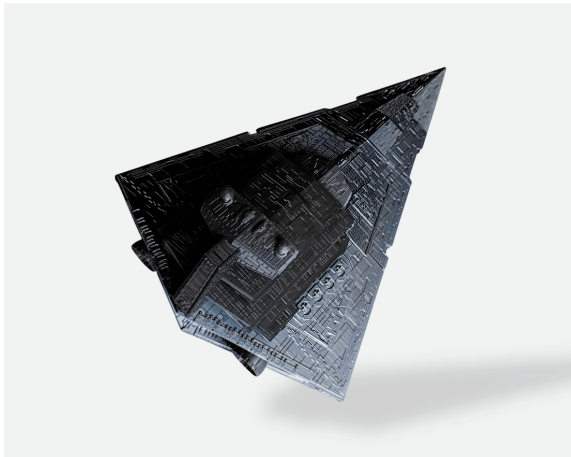


PETG-CF

COMPOSITES FOR FDM 3D PRINTING



MATERIAL NAME

PETG-CF

COLOR

Black

PROCESS

FDM

PRODUCT DESCRIPTION

Carbon Fiber PETG is an FDM composite material based on PETG and added with chopped carbon fiber. It improves rigidity, dimensional stability and appearance texture while retaining the ease of printing and moisture resistance of PETG. It is suitable for functional prototypes, brackets, fixtures and small and medium-sized batches of hard plastic parts, and has high impact performance.

TYPICAL APPLICATIONS

- Functional prototype testing
- End-use plastic parts
- Assembly testing
- Mounting brackets

PRODUCT SAFETY

Thermoplastic printed parts should be handled according to normal workshop safety practices. Avoid high heat, open flames, and inhalation of fumes generated during post-processing or overheating.

PRODUCT DELIVERY & WAREHOUSING

- STORAGE**
Store parts in a dry, cool, and clean environment away from direct sunlight and high heat. Keep the material sealed before processing.
- TRANSPORTATION**
Pack parts securely to prevent warping, scratching, and impact. Protect from moisture and temperature swings during transit.

PROPERTIES OF PRINTED MATERIAL

Properties	Test Method	Value
Density (g/cm3)	ISO 1183	1.23 g/cm3
Water Absorption (%)	ISO 62	0.3%
Hardness	ISO 868	Shore D 71
Tensile strength (MPa)	ISO 527	32±4 MPa
Elongation at break	ISO 527	14±3%
Flexural strength (MPa)	ISO 178	55.5±5 MPa
Flexural modulus (MPa)	ISO 178	1960±200 MPa
Heat deflection temperature @ 0.45 MPa (deg C)	ISO 75	HDT @ 0.45 MPa: 71±3 deg C
Heat deflection temperature @ 1.8 MPa (deg C)	ISO 75	HDT @ 1.8 MPa: 89 deg C
Impact strength notched	ISO 180	7±2 KJ/m²; ISO 180 (Izod)

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