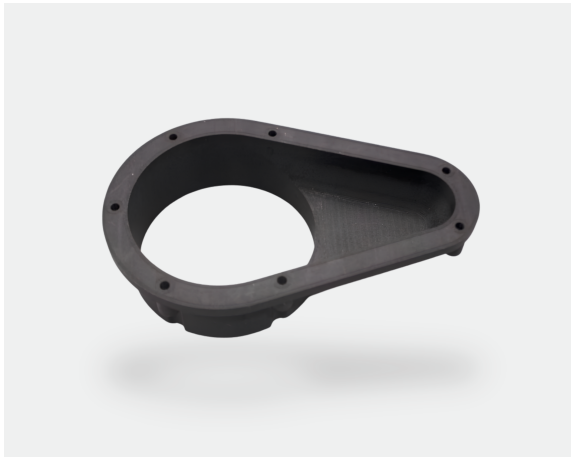


PLA-CF

COMPOSITES FOR FDM 3D PRINTING



MATERIAL NAME

PLA-CF

COLOR

Black

PROCESS

FDM

PRODUCT DESCRIPTION

Carbon Fiber PLA is a PLA composite filament added with carbon fiber. It combines the ease of printing and stable molding of PLA with the high rigidity and matte surface brought by carbon fiber. It is suitable for high-end appearance prototypes, dimensional verification and light-load structural samples.

TYPICAL APPLICATIONS

- Appearance display
- Assembly testing
- Functional prototype testing
- Architecture/Interior Design Models

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/cm ³)	ISO 1183	1.25 g/cm ³
Water Absorption (%)	ISO 62	0.42%
Hardness	ISO 868	Shore D 81
Tensile strength (MPa)	ISO 527	XY: 38 Z: 26 MPa
Tensile modulus (MPa)	ISO 527	XY: 2763 Z: 2206 MPa
Elongation at break	ISO 527	XY: 9.5 Z: 4%
Flexural strength (MPa)	ISO 178	XY: 83 Z: 60 MPa
Flexural modulus (MPa)	ISO 178	XY: 4071 Z: 3149 MPa
Heat deflection temperature @ 0.45 MPa (deg C)	ISO 75	HDT @ 0.45 MPa: 55.4 deg C
Heat deflection temperature @ 1.8 MPa (deg C)	ISO 75	HDT @ 1.8 MPa: 67.2 deg C
Impact strength notched	ISO 179	XY: 23.3 Z: 6.7 KJ/m ² ; ISO 179 (Charpy)

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



www.unionfab.com

China's leading digital manufacturing platform, combining in-house 3D printing and CNC machining with a vetted supplier network for rapid prototyping and on-demand production

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