



PETG-CF

**High-Performance Carbon-Fiber Reinforced Material
for Rigid and Dimensionally Stable Components**

Designed for applications requiring high stiffness, flexural strength, and dimensional stability. Ideal for structural and functional components under mechanical stress.

3D FDM PRINTING



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Main Features

- ✓ Reinforced with carbon fiber
- ✓ High stiffness and flexural strength
- ✓ Excellent dimensional stability
- ✓ Matte surface with a technical texture

Applications

- ✓ Moisture- and impact-resistant printed parts
- ✓ Technical parts or prototype components
- ✓ Structural and functional components subjected to stress
- ✓ High-precision models for demanding applications

Based on currently available data, the information in this document is considered accurate. Fasipol makes no explicit or implicit warranties regarding the results obtained from its use or the accuracy of such results.

Certified Company
UNI EN ISO
9001:2023



Technical Data

PHYSICAL PROPERTIES	METHOD	VALUE
Density	ISO 1183	1.25 g/cm ³
Melt Index (250 °C, 2.16 kg)	-	19.3 ± 2.4 g/10 min
Melting Temperature	DSC	225 °C
Glass Transition Temperature	DSC	68 °C
Vicat Softening Temperature	ISO 306	85 °C
Heat Deflection Temperature (1.8 MPa)	ISO 75	68 °C
Heat Deflection Temperature (0.45 MPa)	ISO 75	74 °C
Saturated Water Absorption (25 °C, 55% RH)	-	0.30 %

MECHANICAL PROPERTIES	METHOD	VALUE
Young's Modulus (X-Y)	ISO 527	2460 ± 230 MPa
Young's Modulus (Z)	ISO 527	1340 ± 150 MPa
Tensile Strength (X-Y)	ISO 527	35 ± 5 MPa
Tensile Strength (Z)	ISO 527	29 ± 4 MPa
Elongation at Break (X-Y)	ISO 527	10.4 ± 0.6 %
Elongation at Break (Z)	ISO 527	4.7 ± 0.4 %
Flexural Modulus (X-Y)	ISO 178	2910 ± 260 MPa
Flexural Modulus (Z)	ISO 178	1560 ± 180 MPa
Flexural Strength (X-Y)	ISO 178	70 ± 5 MPa
Flexural Strength (Z)	ISO 178	48 ± 4 MPa
Impact Strength (X-Y)	ISO 179	41.2 ± 2.6 kJ/m ²
Impact Strength (notched)	ISO 179	15.7 ± 1.6 kJ/m ²
Impact Strength (Z)	ISO 179	10.7 ± 1.6 kJ/m ²

OTHER PHYSICAL AND CHEMICAL PROPERTIES	VALUE
Odor	Odorless
Composition	PETG, carbon fiber
Skin Hazards	None
Chemical Stability	Stable under normal conditions
Solubility in Water	Insoluble
Acid Resistance	Not resistant
Alkali Resistance	Not resistant
Organic Solvent Resistance	Limited resistance to some organic solvents
Oil and Grease Resistance	Resistant to most oils and greases
Flammability	Flammable
Combustion Products	Water and carbon oxides
Odor of Combustion Products	Odorless