



# PETG-HF

**High-Performance Material with Excellent Toughness and Dimensional Stability**

Designed for high-speed 3D printing, this material provides a uniform matte finish, greater durability than PLA, and excellent print quality with dimensional stability. Ideal for strong, long-lasting functional parts.

3D FDM PRINTING



[WWW.FASIPOL.IT](http://WWW.FASIPOL.IT)

## Main Features

- ✓ Strong, durable, and easy to print
- ✓ Ideal for long-term functional parts
- ✓ Uniform matte surface finish without glossy areas
- ✓ Reduces common issues like stringing and blobs

## Applications

- ✓ Mechanical and functional parts under stress
- ✓ Projects requiring long-term durability
- ✓ Fast-printed technical components
- ✓ Moisture-resistant prototypes

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	1.28 g/cm <sup>3</sup>
Melt Index (210 °C, 2.16 kg)	-	28.2 ± 2.7 g/10 min
Melting Temperature	DSC (10 °C/min)	214 °C
Glass Transition Temperature	DSC (10 °C/min)	66 °C
Vicat Softening Temperature	ISO 306	70 °C
Heat Deflection Temperature (1.8 MPa)	ISO 75	62 °C
Heat Deflection Temperature (0.45 MPa)	ISO 75	69 °C
Saturated Water Absorption Rate	25 °C, 55% RH	0.40 %

MECHANICAL PROPERTIES	METHOD	VALUE
Young's Modulus (X-Y)	ISO 527	1810 ± 190 MPa
Young's Modulus (Z)	ISO 527	1540 ± 130 MPa
Tensile Strength (X-Y)	ISO 527	34 ± 4 MPa
Tensile Strength (Z)	ISO 527	23 ± 4 MPa
Elongation at Break (X-Y)	ISO 527	8.6 ± 1.2 %
Elongation at Break (Z)	ISO 527	5.1 ± 0.8 %
Flexural Modulus (X-Y)	ISO 178	2050 ± 120 MPa
Flexural Modulus (Z)	ISO 178	1810 ± 140 MPa
Flexural Strength (X-Y)	ISO 178	64 ± 3 MPa
Flexural Strength (Z)	ISO 178	48 ± 4 MPa
Impact Strength (X-Y)	ISO 179	31.5 ± 2.2 kJ/m <sup>2</sup>
Impact Strength (notched)	ISO 179	6.2 ± 1.8 kJ/m <sup>2</sup>
Impact Strength (Z)	ISO 179	10.6 ± 1.2 kJ/m <sup>2</sup>

OTHER PHYSICAL AND CHEMICAL PROPERTIES	VALUE
Odor	Odorless
Composition	PETG
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 solvents
Oil and Grease Resistance	Resistant to most oils and greases
Flammability	Flammable
Combustion Products	Water and carbon oxides
Odor of Combustion Products	Odorless