



ABS

TECHNICAL FILAMENT FOR 3D PRINTING

ABS is known for its high thermal resistance, impact strength, and durability. Designed to reduce warping and cracking, it offers excellent mechanical performance and prints well at high speeds.

3D FDM PRINTING



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Main Features

- ✓ High thermal and mechanical resistance
- ✓ Reduced risk of warping and cracking
- ✓ Good resistance to water and UV
- ✓ Suitable for technical and functional parts

Applications

- ✓ Functional prototyping
- ✓ Parts exposed to heat and mechanical stress
- ✓ Mechanical parts and impact-resistant components
- ✓ Components for automotive, electronics, and tools

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	1.05 g/cm ³
Melting temperature	DSC	200 °C
Heat deflection temp. (1.8 MPa)	ISO 75	84 °C
Heat deflection temp. (0.45 MPa)	ISO 75	87 °C
Vicat Softening Temperature	ISO 306	94 °C
Water absorption (25 °C, 55% RH)	-	0.65%

MECHANICAL PROPERTIES	METHOD	VALUE
Young's modulus (X-Y)	ISO 527	2200 ±190 MPa
Young's modulus (Z)	ISO 527	1960 ±110 MPa
Tensile strength (X-Y)	ISO 527	33 ±3 MPa
Tensile strength (Z)	ISO 527	28 ±2 MPa
Elongation at break (X-Y)	ISO 527	10.5 ±1.0 %
Elongation at break (Z)	ISO 527	4.7 ±0.8 %
Flexural modulus (X-Y)	ISO 178	1880 ±110 MPa
Flexural modulus (Z)	ISO 178	1590 ±100 MPa
Flexural strength (X-Y)	ISO 178	62 ±4 MPa
Flexural strength (Z)	ISO 178	39 ±4 MPa
Izod impact strength (X-Y)	ISO 179	39.3 ±3.6 kJ/m ²
Izod impact strength notched	ISO 179	21.5 ±2.2 kJ/m ²
Izod impact strength (Z)	ISO 179	7.4 ±1.2 kJ/m ²

OTHER PHYSICAL AND CHEMICAL PROPERTIES	VALUE
Odor	Odorless / Pungent during combustion
Composition	ABS
Skin hazards	None
Chemical stability	Stable under normal conditions
Solubility in water	Insoluble
Acid resistance	Resistant
Alkali resistance	Resistant
Resistance to organic solvents	Not resistant to all
Resistance to oils and greases	Not resistant to all
Flammability	Flammable
Combustion products	Water, carbon oxides, nitrogen oxides
Odor of combustion products	Pungent