



PLA MATTE

Rigid and Versatile Biopolymer for High-Aesthetic-Quality Prints

Eco-friendly and easy-to-print material, characterized by an excellent matte finish. Ideal for prototypes, visual models, and non-functional applications where aesthetics and detail are a priority.

3D FDM PRINTING



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Main Features

- ✓ Good rigidity and surface quality
- ✓ Good flexibility and dimensional stability
- ✓ Ideal for high-speed printing (up to 250-300 mm/s)
- ✓ Biodegradable under industrial conditions

Applications

- ✓ Conceptual models and aesthetic prototypes
- ✓ Mockups for industrial design and architecture
- ✓ Components for high-definition rapid printing
- ✓ Perfect for projects requiring marked visual details

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	1.31 g/cm ³
Melt Index (210 °C, 2.16 kg)	-	18.0 ± 3.2 g/10 min
Melting Temperature	DSC (10 °C/min)	163 °C
Glass Transition Temperature	DSC (10 °C/min)	61 °C
Vicat Softening Temperature	ISO 306	63 °C
Heat Deflection Temperature (1.8 MPa)	ISO 75	52 °C
Heat Deflection Temperature (0.45 MPa)	ISO 75	58 °C
Saturated Water Absorption	25 °C, 55% RH	0,40 %

MECHANICAL PROPERTIES	METHOD	VALUE
Young's Modulus (X-Y)	ISO 527	1960 ± 180 MPa
Young's Modulus (Z)	ISO 527	1670 ± 140 MPa
Tensile Strength (X-Y)	ISO 527	30 ± 5 MPa
Tensile Strength (Z)	ISO 527	22 ± 4 MPa
Elongation at Break (X-Y)	ISO 527	14.8 ± 4.2 %
Elongation at Break (Z)	ISO 527	4.8 ± 1.7 %
Flexural Modulus (X-Y)	ISO 178	2360 ± 250 MPa
Flexural Modulus (Z)	ISO 178	1770 ± 210 MPa
Flexural Strength (X-Y)	ISO 178	53 ± 6 MPa
Flexural Strength (Z)	ISO 178	29 ± 5 MPa
Impact Strength (X-Y)	ISO 179	19.2 ± 3.7 kJ/m ²
Notched Impact Strength	ISO 179	6.3 ± 1.5 kJ/m ²
Impact Strength (Z)	ISO 179	6.6 ± 1.1 kJ/m ²

OTHER PHYSICAL AND CHEMICAL PROPERTIES	VALORE
Odor	Odorless
Composition	PLA
Skin Hazards	None
Chemical Stability	Stable under normal storage and handling
Solubility	Insoluble in water
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, carbon oxides
Odor of Combustion	Odorless