

Metal PLA

STANDARD PLASTICS FOR FDM 3D PRINTING



MATERIAL NAME

Metal PLA

COLOR

Grey

PROCESS

FDM

PRODUCT DESCRIPTION

PLA-Metal is metal-powder-filled PLA with a metallic feel, weight, and polishable appearance, making it suitable for art pieces, display models, props, trophies, and decorative appearance pieces.

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/cm3)	ISO 1183	1.25 g/cm3
Water Absorption (%)	ISO 62	0.4%
Hardness	ISO 868	Shore D 83.5
Tensile strength (MPa)	ISO 527	XY: 34±4 Z: 31±3 MPa
Tensile modulus (MPa)	ISO 527	XY: 2010±220 Z: 1710±150 MPa
Elongation at break	ISO 527	XY: 14.7±1.5 Z: 4.5±1.3%
Flexural strength (MPa)	ISO 178	XY: 66±3 Z: 51±5 MPa
Flexural modulus (MPa)	ISO 178	XY: 2290±210 Z: 2150±180 MPa
Heat deflection temperature @ 0.45 MPa (deg C)	ISO 75	HDT @ 0.45 MPa: 62 deg C
Heat deflection temperature @ 1.8 MPa (deg C)	ISO 75	HDT @ 1.8 MPa: 58 deg C
Impact strength notched	ISO 179	22.3 ± 0.9 KJ/m²; ISO 179 (Charpy)

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