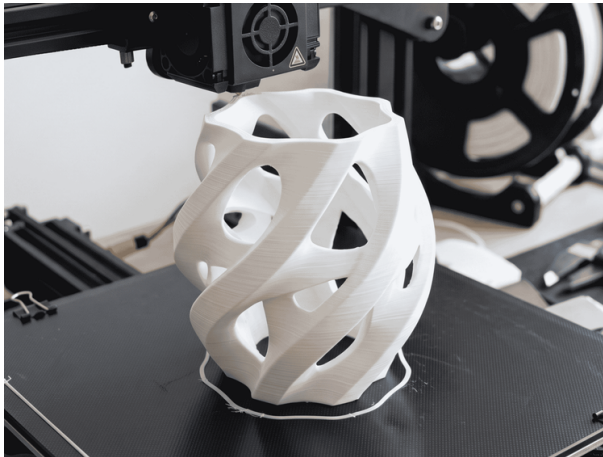


PLA

STANDARD PLASTICS FOR FDM 3D PRINTING



MATERIAL NAME

PLA

COLOR

White

PROCESS

FDM

PRODUCT DESCRIPTION

PLA (polylactic acid) is a thermoplastic polymer derived from renewable resources, a property that sets it apart from other commonly used plastics. PLA is ideal for low-cost prototyping, container manufacturing, and functional parts that carry light loads.

TYPICAL APPLICATIONS

- Low-cost rapid prototyping
- Appearance display
- Functional prototype testing
- Assembly testing

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	1.24 g/cm3
Water Absorption (%)	ISO 62	0.3–0.5%
Hardness	ISO 7619-1	Shore A 80
Tensile strength (MPa)	ISO 527	40±6 MPa
Elongation at break	ISO 527	10±5%
Flexural strength (MPa)	ISO 178	65±6 MPa
Flexural modulus (MPa)	ISO 178	2300±300 MPa
Heat deflection temperature @ 0.45 MPa (deg C)	ISO 75	HDT @ 0.45 MPa: 55±5 deg C
Impact strength notched	ISO 180	5±3 KJ/m²; ISO 180 (Izod)

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