



Use this chart to compare the most common PLA filament types. The table shows the properties, instructions, price ranges and typical uses of the filaments.

PLA types filament chart



THE BUILDING ARCHIVE

MATERIALS	NOZZLE TEMP. °C	BED TEMP. °C	HARDENED NOZZLE REQUIRED	ENCLOSURE ADVISED	DRY BOX ADVISED	OVERALL STRENGTH	EASY TO PROCESS	HEAT RESISTANCE	HIGH IN PRICE	AESTHETIC AND SURFACE FINISH	TYPICAL USES
STANDARD PLA	190 - 220 °C	50 - 60 °C								SMOOTH FINISH, GLOSSY OR MATTE	GENERAL 3D PRINTING
PLA+	200 - 220 °C	50 - 60 °C								SMOOTH FINISH, CAN HAVE MATTE OR GLOSSY OPTIONS	FUNCTIONAL PARTS, ITEMS NEEDING DURABILITY
PLA WOOD-FILLED	190 - 220 °C	50 - 60 °C			✓					WOOD-LIKE APPEARANCE, CAN BE SANDED AND STAINED	DECORATIVE ITEMS, SCULPTURES, ARCHITECTURAL MODELS, TOYS
PLA METAL FILLED	200- 220 °C	50 - 60 °C	✓		✓					METALLIC FINISH, CAN BE POLISHED	DECORATIVE ITEMS, JEWELRY, REPLICAS, MODELS
PLA CARBON FILLED	210 - 230 °C	50 - 60 °C	✓	✓	✓					MATTE, TEXTURED FINISH	FUNCTIONAL PARTS, STRUCTURAL COMPONENTS
PLA GLOW IN THE DARK	190 - 220 °C	50 - 60 °C			✓					GLOWS IN THE DARK	TOYS, DECORATIVE ITEMS, SAFETY SIGNS, NOVELTY ITEMS
PLA SILK	190 - 220 °C	50 - 60 °C								SHINY, SILKY FINISH	DECORATIVE ITEMS, ART PIECES, JEWELRY
PLA MATTE	190 - 220 °C	50 - 60 °C								NON-REFLECTIVE, MATTE FINISH	DECORATIVE ITEMS, ART PIECES
PLA TRANSLUCENT	190 - 220 °C	50 - 60 °C								VARIABLES FROM CLEAR TO TRANSLUCENT	LIGHT COVERS, DECORATIVE ITEMS, ARTISTIC PRINTS
PLA FLEXIBLE	210 - 230 °C	50 - 60 °C			✓					SMOOTH FINISH, SLIGHTLY ELASTIC	FLEXIBLE PARTS, GASKETS, WEARABLE ITEMS, TOYS
PLA CONDUCTIVE	220 - 230 °C	50 - 60 °C			✓					MATTE, SLIGHTLY ROUGH FINISH	LOW-POWER ELECTRONIC CIRCUITS, CONDUCTIVE TRACES,
PLA MAGNETIC	210 - 230 °C	50 - 60 °C			✓					MATTE, SLIGHTLY ROUGH FINISH	EDUCATIONAL PROJECTS, NOVELTY ITEMS,
PLA MARBLE	190 - 220 °C	50 - 60 °C								STONE-LIKE, SPECKLED FINISH	DECORATIVE ITEMS, SCULPTURES, ARCHITECTURAL MODELS
PLA COLOR-CHANGING	190 - 220 °C	50 - 60 °C								CHANGES COLOR WITH TEMPERATURE OR LIGHT	NOVELTY ITEMS, TEMPERATURE INDICATORS, DECORATIVE ITEMS
PLA AROMATIC	190 - 220 °C	50 - 60 °C								SMOOTH FINISH, EMITS SCENT	DECORATIVE ITEMS, NOVELTY ITEMS, SCENTED TOYS
PLA CERAMIC-FILLED	200- 220 °C	50 - 60 °C	✓		✓					STONE-LIKE FINISH, CAN BE POLISHED	DECORATIVE ITEMS, ARTISTIC PRINTS, MODELS
PLA WATER-SOLUBLE	190 - 220 °C	50 - 60 °C			✓					SMOOTH FINISH	SUPPORT MATERIAL FOR COMPLEX PRINTS, TEMPORARY STRUCTURES
PLA FOAMING	200- 220 °C	50 - 60 °C								FOAM-LIKE STRUCTURE	LIGHTWEIGHT PARTS, INSULATED ITEMS, PACKAGING

PLA filament types can vary depending on the supplier from which you purchase them. Different suppliers may offer PLA filaments with varying additives, such as wood, metal, carbon fibers, or specialized blends, each tailored to different applications and printing requirements. It's important to check the product specifications and recommendations provided by the supplier to ensure compatibility with your 3D printer and desired printing outcomes.