

Filament name	Best nozzle temperature	Heating bed	Flexibility	Strenght	Durability	Shrinkage/war ping	Toxic / Food safe	Special requirements	Difficulty to use	Type of 3D printer	Print speed	Build platform	Diameter available	AzureFilm manufactured
ABS Plus	240–260°C	90–120°C	Medium	High	High	Considerable	Non-toxic but not food safe	/	Medium	Recommended enclosure or enclosed printer and stable environment temperatures.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	Yes
ASA	240–260°C	90–120°C	Low	High	High	Minimal	Non-toxic but not food safe	/	Low	Recommended enclosure or enclosed printer. Avoid temperature changes.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	Yes
Carbon Fiber PAHT	270–290°C	90–120°C	Low	High	High	Minimal	Non-toxic but not food safe	Recommended abrasion-resistant nozzle: 0.6mm.	Medium	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	Yes
Carbon Fiber PET	245–270°C	80–90°C	Low	High	High	Minimal	Non-toxic but not food safe	Recommended abrasion-resistant nozzle: 0.6mm.	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	Yes
FLEXIBLE 85A	200–240 °C	0–80 °C	Very High	Medium	Very High	Minimal	Non-toxic but not food safe	Dry the filament before every use.	Medium	No enclosure is needed.	10–30mm/s	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
FLEXIBLE 98A	200–240°C	0–80 °C	Very High	Medium	Very High	Minimal	Non-toxic but not food safe	Dry the filament before every use.	Medium	No enclosure is needed.	10–30mm/s	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
NYLON	260–280°C	90–110°C	High	High	High	Considerable	Non-toxic but not food safe	/	Medium	Recommended enclosure or enclosed printer. Avoid temperature changes.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	Yes
PC ABS	265–285°C	110°C	High	High	High	Minimal	Non-toxic but not food safe	/	Medium	Recommended enclosure or enclosed printer and stable environment temperatures.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PCTG	240–260°C	80°C	Medium	High	High	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PETG Glow	220–240°C	80°C	Medium	High	High	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PETG Neon	220–240°C	80°C	Medium	High	High	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PETG Original	220–240°C	80°C	Medium	High	High	Minimal	Food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	Yes
PETG Pearl	220–240°C	80°C	Medium	High	High	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PETG Transparent	220–240°C	80°C	Medium	High	High	Minimal	Food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	Yes
PLA Glitter	200–230°C	0–60°C	Low	Medium	Medium	Minimal	Non-toxic but not food safe	Recommended abrasion-resistant nozzle: 0.6mm.	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PLA Glow	200–230°C	0–60°C	Low	Medium	Medium	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PLA Neon	200–230°C	0–60°C	Low	Medium	Medium	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PLA Original	200–230°C	0–60°C	Low	Medium	Medium	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	Yes
PLA Pastel	200–230°C	0–60°C	Low	Medium	Medium	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PLA Pearl	200–230°C	0–60°C	Low	Medium	Medium	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PLA Silk	220–240°C	80°C	Low	High	Medium	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PLA Skin	200–230°C	0–60°C	Low	Medium	Medium	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PLA Strongman	200–230°C	0–60°C	Low	Medium but better than PLA Original	Medium	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	Yes
PLA Transparent	200–230°C	0–60°C	Low	Medium	Medium	Minimal	Non-toxic but not food safe	/	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm	Yes
PLA Wood	200–230°C	0–60°C	Low	Medium	Medium	Minimal	Non-toxic but not food safe	Recommended abrasion-resistant nozzle: 0.6mm.	Low	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	Yes
PVA	190–210°C	50–60°C	High	Low	Low	Medium	Non-toxic but not food safe	This material is water-soluble	Medium	No enclosure is needed.	Varies with 3D printer capabilities.	Glass bed, PEI sheet, Kapton, Blue tape + 3D Lac spray	1.75mm & 2.85mm	No