Filament	Special Properties	Uses	Strength	Flexibility	Durability	Difficulty to print	Print Temperature (˚C)	Bed Temperature (˚C)	Printing notes
PLA	Easy to print Biodegradable	Consumer Products	Medium	Low	Medium	Low	180 - 230	No heated bed needed	
ABS	Durable Impact resistant	Functional Parts	Medium	Medium	High	Medium	210 - 250	50 - 100	
PETG (XT, N-Vent)	More flexible than PLA or ABS Durable	All	Medium	High	High	Medium	220 - 235	No heated bed needed	
Nylon	Strong Flexible Durable	All	High	High	High	Medium	220 - 260	50 - 100	Hygroscopic, keep sealed when not in use
TPE	Extremely flexible Rubber-Like	Elastic Parts Wearables	Low	High	Medium	High	225 - 235	40	Print very slowly
TPU	Extremely flexible Rubber-Like	Elastic Parts Wearables	Low	High	Medium	High	225 - 235	No heated bed needed	Print slowly
Wood	Wood-like finish	Home Decor	Medium	Medium	Medium	Medium	195 - 220	No heated bed needed	
HIPS	Dissolvable Biodegradable	Support structures when using ABS on a dual extrusion	Low	Medium	High	Medium	210 - 250	50 - 100	
PVA	Dissolvable Water Soluble Biodegradable Oil Resistant	Support structures when using PLA or ABS on a dual extrusion printer	High	Low	Medium	Low	180 - 230	No heated bed needed	Hygroscopic, keep sealed when not in use
PET (CEP)	Strong Flexible Durable Recyclable	All	High	High	High	Medium	220 - 250	No heated bed needed	
PLA Metal	Metal Finish	Jewelry	Medium	Low	High	High	195 - 220	No heated bed needed	Use hardened nozzle
PLA Carbon Fiber	Rigid Stronger Than Pure PLA	Functional Parts	Medium	Low	High	Medium	195 - 220	No heated bed needed	Use hardened nozzle
Lignin(bioFila)	Biodegradable Stronger than PLA		Medium	Low	Medium	Low	190 - 225	55	
Polycarbonate	Very strong Flexible Durable Transparent Heat Resistant	Functional Parts	High	High	High	Medium	270 - 310	90 - 105	
Conductive	Conductive	Electronics	Medium	Medium	Low	Low	215 - 230	No heated bed needed	Use hardened nozzle
Wax(MOLDLAY)	Melts Away	Lost wax Casting	Low	Low	Low	Low	170 - 180	No heated bed needed	
PETT (T-Glase)	Strong Flexible Transparent Clear	Functional Parts	High	High	High	Medium	235 - 240	No heated bed needed	
ASA	Rigid Durable Weather Resistant	Outdoor	Medium	Low	High	Medium	240 - 260	100 - 120	
PP	Flexible Chemical Resistance	Flexible Components	Medium	High	Medium	High	210 - 230	120 - 150	
POM, Acetal	Strong Rigid Low Friction Resilient	Functional Parts	High	Low	Medium	High	210 - 225	130	
PMMA, Acrylic	Rigid Durable Transparent Clear Impact Resistant	Light diffusers	Medium	Low	High	Medium	235 - 250	100 -120	
Sandstone (LAYBRICK)	Sandstone Finish	Architecture	Low	Low	Low	Medium	165 - 210	No heated bed needed	
Glow-In-The-Dark	Luminous Fluorescent	Fun	Medium	Medium	Medium	Low	215	No heated bed needed	Use hardened nozzle
Cleaning	Cleaning	Unclogging of Nozzles	N/A	N/A	N/A	Low	150 - 260	No heated bed needed	
PC/ABS	Rigid Durable Impact Resistant Resilient Deflecting Heat	Functional Parts	Medium	Low	High	High	260 - 280	120	
Magnetic	Magnetic	Fun	Medium	Medium	Medium	High	195 - 220	No heated bed needed	
Color Changing	Changes Color	Fun	Medium	Medium	Medium	Low	215	No heated bed needed	
nGen	Similar to PETG Heat Resistant Transparent	All	Medium	High	High	Medium	210 - 240	60	
TPC	Extremely Flexible Rubber-Like Chemical resistant Heat resistant UV light resistant	Elastic Parts Outdoor	Low	High	Medium	High	210	60 - 100	
PORO-LAY	Partially Water Soluble	Experimental	Low	High	Medium	Low	220 - 235	No heated bed needed	
FPE	Flexible	Flexible Parts	Low	High	High	Medium	205 -	75[10][11][12][13][14]	