Overview

General Purpose

- PLA
- PETG
- TPU
- ABS

Engineering Grade

- Nylon PA6/PA12
- HIPS
- ASA
- PC
- PC-FR
- PC-PBT
- PP

High Performance

- PPS
- PPA
- PEI

Ultra Performance

- PEEK
- PEKK
- TPI

Specialty Materials

- Carbon Fiber
- Glass Fiber
- ESD-Safe
- Wear Resistant
- Flame Retardant
- Bio/Recycled
- Healthcare

Filament type	mechanical load capacity	Stiffness	Wear resistance	Softening temperature (°C)	Properties	Color/Type	Price
PLA (Polylactic Acid)	low	high	low	60-65	Biodegradable, light	Black, Green, Silver, Grey, Pink, Purple, Magnetic, Glass Fiber, Blue, Red, Natural, Wood, Yellow, Trasparent, Carbon Fiber, Grey, White, Orange, Metallic, Brown, Copper, Glow in Dark	€
PETG	medium	medium	low	70-80	Robust, flexible, good impact resistance	Black, Green, Silver, Grey, Pink, Glass Fiber, Blue, Red, Natural, Purple, Yellow, Carbon Fiber, Grey, White, Orange, Metallic, Brown	€
TPU (Thermoplastic Polyurethane)	low	none	low	-40 bis -60	Elastic, shock absorbing, flexible	Black, Green, Silver, Grey, Blue, Red, Natural, Grey, White, Orange	€
ABS	medium	medium	low	95-105	Strong, tough, high temperature resistance	Black, Green, Silver, Grey, Pink, Glass Fiber, Blue, Red, Natural, Purple, Yellow, Carbon Fiber, Grey, White, Orange, Metallic, Brown	€€
Nylon PA6/PA12	high	high	very high	175-227	Strong, light, high abrasion resistance, high temperature resistance	Black, Glass Fiber, Natural, Carbon Fiber, Grey	€€€
HIPS (High-Impact Polystyrene)	high	medium	high	85-95	Good toughness, good impact strength	Black, Green, Silver, Blue, Red, Natural, Grey, White, Orange	€€
ASA (Acrylonitrile Styrene Acrylate)	high	medium	high	95-105	UV-resistant, weatherproof, low temperature distortion	Black, Green, Silver, Grey, Pink, Purple, Magnetic, Glass Fiber, Blue, Red, Natural, Wood, Yellow, Trasparent, Carbon Fiber, Grey, White, Orange, Metallic, Brown, Copper, Glow in Dark	€€€
PC (Polycarbonat)	high	high	high	145-155	High temperature resistance, impact resistant, UV-resistant, electrically insulating	Black, Silver, Natural, Blue, Red, Trasparent, Grey, White	€€€
PC-FR (Polycarbonat-Flame Resistant)	high	high	high	145-155	High temperature resistance, impact resistant, UV-resistant, electrically insulating, non-flammable	Black, White	€€€
PC-PBT	high	high	high	180-220	High temperature resistance, suitable for low temperatures (-80°C), impact resistant, UV resistant, electrically insulating,	Black, Natural	€€€
PP/PPS (Polypropylen)	high	high	high	130-160	Low weight, chemically resistant, mechanically resilient	Black, Glass Fiber, Natural, Carbon Fiber	€€€€
PPA (Polyphthalamide)	very high	very high	very high	230-240	High Temp Nylon, strong, heat resistant, chemical resistant	Black, Glass Fiber, Natural, Carbon Fiber	€€€€
PEI (Polyetherimide, Ultem)	very high	high	high	217-224	High temperature resistant, robust	Natural	€€€€€
PEEK (Polyetheretherketon)	very high	very high	very high	343-450	Extremely heat-resistant, mechanically stable	Black, Glass Fiber, Natural, Carbon Fiber	€€€€€
PEKK (Polyetherketonketon)	very high	very high	very high	280-330	Extremely heat-resistant, mechanically stable	Black, Glass Fiber, Natural, Carbon Fiber	€€€€€
TPI (Theromplastic Polyimide)	very high	very high	very high	230-240	Robust, rigid, dimensionally stable, resistant to high temperatures, chemically resistant, electrically insulating, wear-resistant	Natural, Carbon Fiber	€€€€€