



PLA+ (PRO)

Our new PLA+(Pro) is a stronger and easy to use high-grade PLA. It has a very low shrinkage factor and will not deform after cooling and has the same typical features of PLA, but stronger and less brittle than basic PLA. It's the most popular materials for 3D printing.



PLA SILK

The PLA SILK has a beautiful silky and smooth shine to it. It's based on PLA material which makes it suitable for all printers and prints very easily. The colors of the surface and shine look even better, when viewed from different angles giving a unique glossy effect. Slower printing and low temperature improves the silky effect.



PLA MATTE

The PLA MATT is a version of PLA, but with a beautiful and aesthetical matt surface. It has a rough feeling and a unique look. This material can be printed on most common printers and sticks well to most build plate materials.



ABS+ (PRO)

Our new ABS+ (PRO) is the next-generation ABS filament. By applying a "minimum warp technology" to the filament, we produced a filament with far less cracking and with reliable bed adhesion to most build plate materials such as glass, tape & other adhesives. improving the mechanical properties making our ABS+ extra strong and with high impact tolerance.



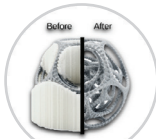
PETG

PETG is a strong material with high clarity and odor neutral. It has some flexibility and practically no shrinkage. PETG combines the advantages of both PLA and ABS, together with the high impact strength.



PA (NYLON)

PA is high-performance nylon material with a wide range of mechanical and chemical properties. It is one of the most popular solutions for industrial grade applications that need to last. It has high impact (even at low temperatures), crack & scratch resistance, food/water contact acceptable, great chemical & weathering resistance and excellent dimensional stability.



PVA (WATER DISSOLVABLE)

PVA is the ultimate solution for printing complex models that require supports, and has a high tensile strength for applications other than supporting material. It's quickly soluble in water, bonds well to plastics and prints easy. it is an excellent supporting material for dual extruder 3D printing. This polyvinyl alcohol-based filament is nontoxic and biodegradable once dissolved in water. PVA Comes in natural color and suitable with materials based on PLA only.



HIPS (LIMONENCE DISSOLVABLE)

HIPS is quickly soluble in limonene and is an excellent supporting material for dual extruder 3D printing and has a high tensile strength for applications other than supporting material. it bonds well to plastics and prints easy. suitable for printing with ABS, PETG, NYLON, CARBON Soluble support materials and soluble in Limonene with little water absorption, Good toughness. available in colors



PA-CF (PA-Carbon Fiber)

PA-CF is a PA(Nylon) material combined with carbon-fibers that brings properties of 3D printed parts closer to injection molding. printed parts are stronger, tougher and stiffer compared with other FFF materials available. Although it's Special qualities PA-CF is still is easy to print



ASA

ASA is "industrial-grade" filament with many features such as UV resistance, zero warp technology and excellent mechanical properties. it is the perfect replacement for ABS when you require a higher performance material. it has great strength and interlayer adhesion and features one of the best aesthetics possible with FDM 3D printing. ASA is perfect when you are looking for beautiful and strong prints that also last outside, especially in high UV conditions.



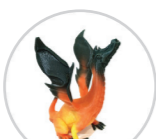
MARBLE

MARBLE is a PLA based biodegradable material. It has a beautiful marble-like surface to the printed models and its unique texture helps hiding the layer lines very well. like PLA, it is environment friendly, good toughness, good strength. Low material shrinkage rate, uniform diameter.



PC (POLYCARBONATE)

PC is a high-performance plastic that possesses a unique balance of toughness, dimensional stability, optical clarity, high heat resistance and excellent electrical resistance. PC is commonly used to make all sorts of products including bulletproof glass, riot shields, cellphone exteriors and many other products that require an engineering grade material.



PLA COLOR CHANGE (35 temp)

PLA COLOR CHANGE Is identical to PLA in its properties. Very easy to print without distortion and without the need for special or complex printing specifications. This material changes color when the temperature changes above 33°C.



TPU95 (FLEXIBLE)

TPU95 is a flexible filament for easy & high speed printing on both direct and Bowden style 3D printers. it features an exceptionally high heat resistance (80°C) and can be stretched as far as 350% before reaching its breaking point. TPU95A does not require the use of a heated bed and can even be printed straight onto (clean) glass. TPU95A is an extremely usable flex-filament with a wide variety of different applications such as Orthopedic insoles, Prosthetics, Vibration dampers and many more.



TPE75 (ELASTIC)

TPE75 - A very flexible material that simulates rubber. Ideal for models that require sealing, smartphone protectors, tires and more. TPE75 wire can stretch up to 750% before breaking. This material is recommended for slow printing on direct-drive extruder printers. This material is not suitable for Bowden extruders.



METAL FILL (Copper, Bronze,Aluminum)

Metal Fill – Is a PLA based raw material that comes in three versions: Copper, Bronze, Aluminum and contains up to 50% real metal powder. After printing, the model can be polished to a completely metallic appearance and weighs heavier than regular PLA. This material mixed with a special lubricant that allows its continuous flow in the nozzle. Can be printed with any standard printer, the material behaves like a standard PLA and no special conditions are required.

Premium quality material
Uniform diameter tolerance



ALMA

3D PRINTER FILAMENT

THE EDGE OF 3D PREMIUM FILAMENT



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OPERATING DATA

Model name	Specs	Print temperature	Build platform temperature	Print speed	Cooling fan	Enclosure	Print layer thickness	Raft
PLA+ (PRO)	1.75mm	190~220°C	Not required	60~90mm/s	100%	Not required	0.1~0.2mm	Not required
PETG	1.75mm	220~240°C	80~100°C	60~90mm/s	30%-100%	Not required	0.1~0.2mm	Not required
ABS Pro	1.75mm	220~240°C	50~100° (>80 need Porous plate)	60~90mm/s	0%	Required	0.1~0.2mm	Not required
ABS	1.75mm	220~240°C	80~110° (>80 need Porous plate)	60~90mm/s	0%	Required	0.1~0.2mm	Required
HIPS	1.75mm	220~240°C	80~110° (>80 need Porous plate)	60~90mm/s	0%-30%	Required	0.1~0.2mm	Required
METAL FILL (Copper Bronze, Aluminum)	1.75mm	180~220°C	Not required	60~90mm/s	100%	Not required	0.2mm	Not required
TPE75 (ELASTIC)	1.75mm	170~220°C	50~60°C	20~30mm/s	100%	Not required	0.2mm	Not required
TPU95 (FLEXIBLE)	1.75mm	190~230°C	50~60°C	25~40mm/s	100%	Not required	0.2mm	Not required
PA (NYLON)	1.75mm	220~260°C	80~110°C	60~90mm/s	0%	Required	0.1~0.2mm	Required
PC	1.75mm	240~260°C	100~120°C	60~90mm/s	0%	Required	0.1~0.2mm	Required
Pearl	1.75mm	190~220°C	0~50°C	60~90mm/s	100%	Not required	0.1~0.2mm	Not required
PLA	1.75mm	190~220°C	0~50°C	60~90mm/s	100%	Not required	0.1~0.2mm	Not required
HS PLA	1.75mm	190~220°C	0~50°C	60~150mm/s	100%	Not required	0.1~0.2mm	Not required
PP	1.75mm	200~240°C	80~110° (>80 need Porous plate)	30~60mm/s	0%	Required	0.1~0.2mm	Required
PVA	1.75mm	190~220°C	0~50°C	60~90mm/s	100%	Not required	0.2mm	Not required
COLOR CHANGE (Temp. 33)	1.75mm	190~220°C	Not required	60~90mm/s	100%	Not required	0.1~0.2mm	Not required
WOOD	1.75mm	180~220°C	0~50°C	60~90mm/s	30%-100%	Not required	0.2mm	Required
MARBLE	1.75mm	190~220°C	Not required	60~90mm/s	100%	Not required	0.1~0.2mm	Not required
PA-CF	1.75mm	260~280°C	70~100°C	40~60mm/s	0%	Required	0.1~0.2mm	Not required
ASA	1.75mm	240~260°C	100~110°C	40~60mm/s	0%	Required	0.1~0.2mm	Not required
PLA MATTE	1.75mm	190~220°C	Not required	60~90mm/s	100%	Not required	0.1~0.2mm	Not required
PLA SILK	1.75mm	190~220°C	Not required	60~90mm/s	100%	Not required	0.1~0.2mm	Not required



TECHNICAL SPECS

Model name	Package specs	Density	The melt flow rate(190 ,2.16Kg)	Water absorption rate (saturated, 23° C)	Tensile Strength	Bending Strength	Flexural modulus	Notched impact strength (IZOD, 23° C)	Elongation at break	Heat distortion temperature	Diameter	Roundness deviation	Color
PLA+ (PRO)	0.5/1.0Kg	1.25±0.05g/cm3	5~7g/10min	0.50%	≥50MPa	≥50MPa	≥2300MPa	≥50J/m (ASTM D256)	≥10%	≥55°C	±0.05mm	≤0.05mm	Nature, Black, White, Red, Yellow, Blue, Green, Orange, Pink, Grey,Rose, Purple, Brown, Gold, Silver
PETG	0.5/1.0Kg	1.27±0.05g/cm3	5~7g/10min	0.30%	≥52MPa	≥88MPa	≥2200MPa	----	≥150.0%	≥70°C	±0.05mm	≤0.05mm	Nature, White, Yellow, Green, Blue, Rose, Red,Black
ABS Pro	0.5/1.0Kg	1.08±0.2g/cm3	2~4g/10min	1%	≥53MPa	≥70MPa	≥2300MPa	≥108J/m (ASTM D256) ≥19KJ/m2 (ISO179)	≥30.0%	≥88°C	±0.05mm	≤0.05mm	Nature, Black, White, Red, Yellow, Blue, Green, Orange, Pink, Grey, Purple, Brown, Gold, Silver
ABS	0.5/1.0Kg	1.04±0.2g/cm3	2~4g/10min	1%	≥43MPa	≥70MPa	≥2300MPa	≥108J/m (ASTM D256) ≥19KJ/m2 (ISO179)	≥30.0%	≥88°C	±0.05mm	≤0.05mm	Nature, Black, White, Red, Yellow, Blue, Green, Orange, Pink, Grey, Purple, Brown, Gold, Silver
HIPS	0.5/1.0Kg	1.04±0.2g/cm3	2~5g/10min	1%	≥30MPa	≥60MPa	≥1800MPa	≥100J/m (ASTMD256)	≥50.0%	≥90°C	±0.05mm	≤0.05mm	Nature, Black, White, Red, Yellow, Blue
METAL FILL (Copper Bronze, Aluminum)	0.5/1.0Kg	1.45±0.05g/cm3	5~7g/10min	1%	≥50MPa	≥50MPa	----	≥16J/m (ASTM D256)	≥2.0%	≥50°C	±0.05mm	≤0.05mm	Copper, Bronze,Aluminum
TPE75 (ELASTIC)	0.5Kg	1.20±0.05g/cm3	2~4g/10min	0.50%	≥35MPa	≥35MPa	----	-----	≥700.0%	----	±0.05mm	≤0.05mm	Nature, Black, White, Red, Yellow, Blue, Green, Orange, Pink
TPU95 (FLEXIBLE)	0.5/1.0Kg	1.25±0.05g/cm3	3~6g/10min	0.50%	≥35MPa	≥35MPa	----	-----	≥350.0%	≥90°C	±0.05mm	≤0.05mm	Nature, Black, White, Red, Yellow, Blue, Green, Orange, Pink
PA (NYLON)	0.5/1.0Kg	1.01±0.05g/cm3	5~7g/10min	0.50%	≥50MPa	≥60MPa	≥1500MPa	≥105J/m (ASTM D256)	≥150.0%	≥100°C	±0.05mm	≤0.08mm	Nature,White,Black
PC	0.5/1.0Kg	1.20±0.05g/cm3	19~21g/10min (300°C, 1.2Kg)	0.50%	≥50MPa	≥50MPa	≥2200MPa	≥700J/m (ASTM D256)	≥50.0%	≥125°C	±0.05mm	≤0.05mm	Nature
Pearl	0.5/1.0Kg	1.25±0.05g/cm3	3~5g/10min	0.50%	≥50MPa	≥50MPa	≥2300MPa	≥25J/m (ASTM D256)	≥15.0%	≥55°C	±0.05mm	≤0.05mm	Nature, Black, White, Red, Yellow, Blue, Green, Orange, Pink, Grey, Purple, Brown, Gold, Silver
PLA	0.5/1.0Kg	1.25±0.05g/cm3	5~7g/10min	0.00%	≥60MPa	≥60MPa	≥2500MPa	≥16J/m (ASTM D256)	≥3.0%	≥55°C	±0.05mm	≤0.05mm	Nature, Black, White, Red, Yellow, Blue, Green, Orange, Pink, Rose , Grey, Purple, Brown, Gold, Silver, Transparent Red, Transparent Blue, Transparent Green, Transparent Orange, Transparent Yellow
HS PLA	0.5/1.0Kg	1.25±0.05g/cm3	8~12g/10min	0.50%	≥60MPa	≥60MPa	≥2500MPa	≥16J/m (ASTM D256)	≥3.0%	≥55°C	±0.05mm	≤0.05mm	Black, Red(485C), Red(484C), Blue, Yellow, Green, Orange, Purple
PP	0.5Kg	0.93±0.05g/cm3	20~22g/10min	0.50%	≥20MPa	≥20MPa	≥1000MPa	≥32J/m (ASTM D256)	≥500.0%	≥100°C	±0.05mm	≤0.08mm	Nature
PVA	0.5Kg	1.25±0.05g/cm3	2~4g/10min	----	≥10MPa	≥15MPa	≥190MPa	≥16J/m (ASTM D256)	≥11.0%	≥55°C	±0.08mm	≤0.08mm	Nature
COLOR CHANGE (Temp. 33)	0.5/1.0Kg	1.25±0.05g/cm3	5~7g/10min	0.50%	≥60MPa	≥60MPa	≥2500MPa	≥16J/m (ASTM D256)	≥3.0%	≥55°C	±0.05mm	≤0.05mm	Orange to Yellow, Purple to Rose, Grey to White, Brown to Green
WOOD	0.5/1.0Kg	1.20±0.05g/cm3	5~7g/10min	0.50%	≥40MPa	≥40MPa	----	≥5J/m (ASTM D256)	≥2.0%	≥50°C	±0.05mm	≤0.05mm	Light,Dark
MARBLE	0.5/1.0Kg	1.25±0.05g/cm3	5~7g/10min	0.50%	≥60MPa	≥60MPa	≥2500MPa	≥16J/m (ASTM D256)	≥3.0%	≥55°C	±0.05mm	≤0.05mm	Black, Brown
PA-CF	1.0Kg	1.24±0.05g/cm3	3~4g/10min	0.30%	≥130MPa	----	----	≥35KJ/m2 (ISO179)	≥2%	≥90°C	±0.05mm	≤0.05mm	Black
ASA	0.5/1.0Kg	1.09±0.01g/cm3	3~4g/10min	1.00%	≥45Mpa	≥65Mpa	≥2200MPa	≥14KJ/m2 (ISO179)	----	≥80°C	±0.05mm	≤0.05mm	Natural, White, Black
PLA MATTE	0.5/1.0Kg	1.25±0.05g/cm3	5~7g/10min	0.50%	≥50MPa	≥50MPa	≥2300MPa	≥50J/m (ASTM D256)	≥10%	≥55°C	±0.05mm	≤0.05mm	Nature, Black, White, Red, Yellow, Blue, Green, Orange, Pink, Grey,Rose, Purple, Brown, Gold, Silver
PLA SILK	0.5/1.0Kg	1.25±0.05g/cm3	5~7g/10min	0.50%	≥50MPa	≥50MPa	≥2300MPa	≥50J/m (ASTM D256)	≥10%	≥55°C	±0.05mm	≤0.05mm	Nature, Black, White, Red, Yellow, Blue, Green, Orange, Pink, Grey,Rose, Purple, Brown, Gold, Silver