

Material	Printing with enclosure	Dry box recommended	Hardened nozzle required	Nozzle temperature	Bed temperature	Printable on textured sheet	Printable on smooth PEI sheet	Printable on satin sheet	Soluble with common solvents	Heat deflection temperature	Impact resistance Charpy	Tensile strength	Price
PLA	No	No	No	210 - 215 °C	60 °C	✓	✓	✓	✗	<div><div style="width: 20%;"></div></div>	<div><div style="width: 20%;"></div></div>	<div><div style="width: 100%;"></div></div>	<div><div style="width: 10%;"></div></div>
AmazonBasics PLA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform				\$22.99
Das Filament PLA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	54 °C	16 kJ/m²	55 Mpa	\$28.04
EUMAKERS PLA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	54 °C	13 kJ/m²	41 Mpa	\$40.12
Esun PLA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	54 °C	16 kJ/m²	65 Mpa	\$27
Fiberlogy PLA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	54 °C	15 kJ/m²	58 Mpa	\$25.19
Fillamentum PLA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	54 °C	15 kJ/m²	50 Mpa	\$34.05
Floreon 3D PLA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform				\$46.98
Hatchbox PLA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	56 °C	15 kJ/m²	46 Mpa	\$19.99
Plasty Mladec PLA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	55 °C	16 kJ/m²	54 Mpa	\$22.26
Prusament PLA	No	No	No	215 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	55 °C	12 kJ/m²	57 Mpa	\$30.24
Verbatim PLA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	50 °C	16 kJ/m²	63 Mpa	\$32.48
ColorFabb PLA-PHA	No	No	No	210 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform		30 kJ/m²	61 Mpa	\$58.28
Devil Design PLA	No	No	No	215 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	55 °C	15 kJ/m²	59 Mpa	\$25.92
Overture PLA	No	No	No	215 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	53 °C	21 kJ/m²	29 Mpa	\$24.99
Spectrum PLA	No	No	No	215 °C	60 °C	✓	✓	✓	Toluene, EDC, THF, Chloroform	58 °C	15 kJ/m²	53 Mpa	\$26.83
PETG	No	No	No	230 - 270 °C	90 °C	✓	⚠ with glue stick	✓	✗	<div><div style="width: 20%;"></div></div>	<div><div style="width: 20%;"></div></div>	<div><div style="width: 100%;"></div></div>	<div><div style="width: 10%;"></div></div>
E3D Edge	No	No	No	240 °C	90 °C	✓	⚠ with glue stick	✓	DCM	77 °C	47 kJ/m²	51 Mpa	\$41.55
ColorFabb XT	No	No	No	270 °C	90 °C	✓	⚠ with glue stick	✓	DCM	75 °C	64 kJ/m²	48 Mpa	\$56.65
Fiberlogy PETG	No	No	No	240 °C	90 °C	✓	⚠ with glue stick	✓	DCM	68 °C	42 kJ/m²	51 Mpa	\$28.16
Plasty Mladec PETG	No	No	No	240 °C	90 °C	✓	⚠ with glue stick	✓	Acetaldehyde, Benzene, DCM	70 °C	75 kJ/m²	37 Mpa	\$23
Prusament PETG	No	No	No	250 °C	90 °C	✓	⚠ with glue stick	✓	DCM	68 °C	no break	46 Mpa	\$36.29
Taulman T-Glase	No	No	No	240 °C	90 °C	✓	⚠ with glue stick	✓	THF, DCM	78 °C	79 kJ/m²	46 Mpa	\$42.2

Material	Weldability	Layer Adhesion	Surface Finish	Temp. Range (°C)	Temp. (°C)	Weldability	Weldability	Weldability	Chemical Resistance	Temp. (°C)	Impact Energy (kJ/m²)	Tensile Strength (Mpa)	Price (\$/kg)
Verbatim PETG	No	No	No	240 °C	90 °C	✓	with glue stick	✓	DCM	70 °C	34 kJ/m²	50 Mpa	\$28.12
Devil Design PETG	No	No	No	230 °C	90 °C	✓	with glue stick	✓	DCM	70 °C	24 kJ/m²	47 Mpa	\$22.22
PETG HT	No	No	No	270 °C	110 °C	✓	with glue stick	✓	✗	<div><div style="width: 25%;"></div></div>	<div><div style="width: 30%;"></div></div>	<div><div style="width: 20%;"></div></div>	<div><div style="width: 20%;"></div></div>
ColorFabb HT	No	No	No	270 °C	110 °C	✓	with glue stick	✓	DCM	100 °C	no break	42 Mpa	\$78.08
ASA	Yes recommended	No	No	260 - 265 °C	95 - 110 °C	with glue stick	with glue stick	✓	✓	<div><div style="width: 25%;"></div></div>	<div><div style="width: 10%;"></div></div>	<div><div style="width: 20%;"></div></div>	<div><div style="width: 15%;"></div></div>
Fillamentum ASA	Yes recommended	No	No	265 °C	95 °C	with glue stick	with glue stick	✓	Acetone	93 °C	44 kJ/m²	34 Mpa	\$37.27
Prusament ASA	Yes recommended	No	No	260 °C	110 °C	with glue stick	with glue stick	✓	Acetone	86 °C	25 kJ/m²	42 Mpa	\$42.69
ABS	Yes recommended	No	No	240 - 255 °C	110 °C	with glue stick	with glue stick	✓	✓	<div><div style="width: 25%;"></div></div>	<div><div style="width: 10%;"></div></div>	<div><div style="width: 20%;"></div></div>	<div><div style="width: 10%;"></div></div>
Esun ABS	Yes recommended	No	No	255 °C	110 °C	with glue stick	with glue stick	✓	Acetone				\$27
Fillamentum ABS	Yes recommended	No	No	240 °C	110 °C	with glue stick	with glue stick	✓	Acetone	81 °C	32 kJ/m²	39 Mpa	\$29.18
Hatchbox ABS	Yes recommended	No	No	255 °C	110 °C	with glue stick	with glue stick	✓	Acetone				\$19.99
Plasty Mladec ABS	Yes recommended	No	No	255 °C	110 °C	with glue stick	with glue stick	✓	Acetone	97 °C	30 kJ/m²	36 Mpa	\$22.26
Verbatim ABS	Yes recommended	No	No	255 °C	110 °C	with glue stick	with glue stick	✓	Acetone		21 kJ/m²	47 Mpa	\$28.12
PC (Polycarbonate)	Yes recommended	No	No	270 - 275 °C	115 °C	with glue stick	with glue stick	✓	✗	<div><div style="width: 30%;"></div></div>	<div><div style="width: 20%;"></div></div>	<div><div style="width: 25%;"></div></div>	<div><div style="width: 15%;"></div></div>
Polymaker PC-Max (PolyMax)	Yes recommended	No	No	270 °C	115 °C	with glue stick	with glue stick	✓	Chloroform, DCM	109 °C	74 kJ/m²	59 Mpa	\$72.87
Prusament PC Blend	Yes recommended	No	No	275 °C	115 °C	with glue stick	with glue stick	✓	Chloroform, DCM	113 °C	no break	63 Mpa	\$60.49
CPE	No	Yes	No	275 °C	90 °C	✓	with glue stick	✓	✗	<div><div style="width: 15%;"></div></div>	<div><div style="width: 15%;"></div></div>	<div><div style="width: 20%;"></div></div>	<div><div style="width: 15%;"></div></div>
Fillamentum CPE	No	Yes	No	275 °C	90 °C	✓	with glue stick	✓	DCM	75 °C	58 kJ/m²	42 Mpa	\$56.73
PVA / BVOH	No	Yes	No	195 - 215 °C	60 °C	✓	✓	✓	✓	<div><div style="width: 5%;"></div></div>	<div><div style="width: 10%;"></div></div>	<div><div style="width: 30%;"></div></div>	<div><div style="width: 15%;"></div></div>
PrimaSelect PVA+	No	Yes	No	195 °C	60 °C	✓	✓	✓	Water	41 °C	23 kJ/m²	78 Mpa	\$120.74
Verbatim BVOH	No	Yes	No	215 °C	60 °C	✓	✓	✓	Water	44 °C	21 kJ/m²	45 Mpa	\$193.58
HIPS	No	No	No	220 °C	110 °C	✓	✓	✓	✓	<div><div style="width: 25%;"></div></div>	<div><div style="width: 10%;"></div></div>	<div><div style="width: 15%;"></div></div>	<div><div style="width: 10%;"></div></div>
Generic HIPS	No	No	No	220 °C	110 °C	✓	✓	✓	D-Limonene, Acetone				
PP (Polypropylene)	Yes	No	No	220 °C	100 °C	✗	with PP tape	✓	✗	<div><div style="width: 10%;"></div></div>	<div><div style="width: 30%;"></div></div>	<div><div style="width: 10%;"></div></div>	<div><div style="width: 15%;"></div></div>
Verbatim PP	Yes	No	No	220 °C	100 °C	✗	with PP tape	✓	✗	56 °C	no break	⊕	\$77.98
Flex	No	Yes	No	230 - 260 °C	50 - 85 °C	✓	with glue stick	with glue stick	✗	<div><div style="width: 10%;"></div></div>	<div><div style="width: 30%;"></div></div>	<div><div style="width: 10%;"></div></div>	<div><div style="width: 15%;"></div></div>
Filatech FilaFlex40	No	Yes	No	230 °C	50 °C	✓	with glue stick	with glue stick	Chloroform, DCM	50 °C	no break	⊕	\$84.68

Prusament PVB	No	No	No	215 °C	75 °C	not recommended not recommended	✓	✓	✓	IPA	55 °C	55 kJ/m <sup>2</sup>	50 Mpa	\$60.48
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**Material:**

Material type and list of supported manufacturers

**Printing with enclosure:**

Some materials require higher ambient temperature to prevent warping. The best way to achieve this is to use an enclosure. If you don't have an enclosure, adding a high skirt around the model in a slicer may help.

**Dry box recommended:**

Some filaments tend to absorb moisture. This can be reduced using drybox.

**Hardened nozzle required:**

Some filaments contain highly abrasive particles that can damage brass nozzles.

**Nozzle temperature:**

Values shown below apply to the Original Prusa i3MK3S profile in PrusaSlicer. Follow the manufacturer's directions if you're using anything other than an Original Prusa 3D printer.

**Bed temperature:**

Values shown below apply to the Original Prusa i3MK3S profile in PrusaSlicer. Follow the manufacturer's directions if you're using anything other than an Original Prusa 3D printer.

**Printable on textured sheet:**

Recommended print sheet type and its surface preparation - Unsuitable combination can cause damage to the sheet!

**Printable on smooth PEI sheet:**

Recommended print sheet type and its surface preparation - Unsuitable combination can cause damage to the sheet!

**Printable on satin sheet:**

Recommended print sheet type and its surface preparation - Unsuitable combination can cause damage to the sheet!

**Soluble with common solvents:**

Common (relatively safe) solvents are water, Isopropyl alcohol, D-limonene and Acetone. Other solvents should be handled only by skilled lab workers.

**Heat deflection temperature:**

Heat Deflection Temperature (ISO 75) is the point when the test object bends under a 0.45MPa load.

**Impact resistance Charpy:**

Energy necessary to break test objects with Charpy pendulum (ISO 179-1).

**Tensile strength:**

Force necessary to tear (or deform) test objects (ISO 527-1, ASTM D638 for flexible filaments).

**Price:**

Calculated price per 1kg.

