

Technical Data Sheet

PETG Pro Filament

PETG Pro is an FFF 3D printing filament produced from a highly fluid PETG modified material. Like PETG, PETG Pro has good dimensional stability, low warping and no cracking. Through the adjustment of formula and production process, PETG Pro has a lower printing temperature (220°C), which is suitable for most FFF 3D printers.

Main features:

Easy to print / dimensionally stable

Main Specifications:

Physical Properties	Test Means		
Density	ISO 1183	g/cm ³	1.27~1.28
MFR(250°C/2.16Kg)	ISO 1133	g/10min	8~12
Moisture Absorption(23°C/24h)	ISO 62	%	<0.2
Mechanical Properties			
Tensile strength	ISO 527	Mpa	41~45
Elongation at break	ISO 527	%	10~12
Flexural Modulus	ISO 527	Mpa	1400~1500
Flexural Strength	ISO178	Mpa	64~66
Impact Strength	ISO180	KJ/m ²	5~6
Thermodynamic Properties			
HDT@ 0.455 MPa(66 psi)	ISO75	°C	68
Continuous Use Temperature	IEC 60216	°C	65

Test Sample Printing Conditions:

3D Printer	Prusa XL
Nozzle Diameter	0.4mm
Nozzle Temperature	220 °C
Printing Speed	50mm/s
Layer	1.2mm
Infill	100%
Standard Printed Sample	See blew attachment

Recommended Printing Parameters:

Parameters	
Nozzle Temperature	210~230℃(recommend 220℃)
Bed Temperature	Room temperature to 70℃(recommend 50℃)
Bed Materials	Prusa textured powder coated print sheet
Nozzle Diameter	φ 0.4
Model Cooling Fan	0~50%
Layer	0.12~0.3mm
Printing Speed	40~60mm/s(recommend 50mm/s)
Idle Speed	60~120mm/s
Printing Environmental Temperature	Room temperature to 50℃
Retraction Distance	1~2mm
Retraction Speed	30~50mm/s
Supporting Materials	Self-support

Note:

To prevent moisture absorption and contamination, the packaging of consumables should be kept airtight and undamaged until they are opened for use. For the same reason, some used consumables should be resealed before storage.

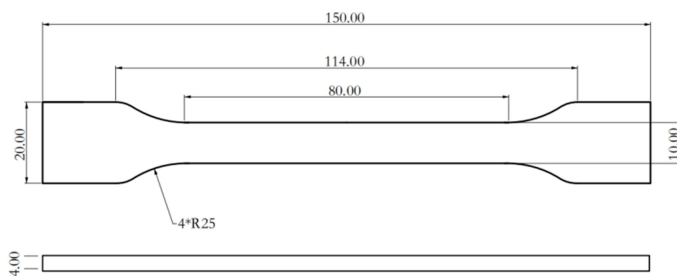
PETG Pro filament tends to absorb moisture, and it is recommended to dry it before use.

Dry the filament in a hot air oven at 70°C for at least 5 hours to ensure the success rate and quality of the printed model.

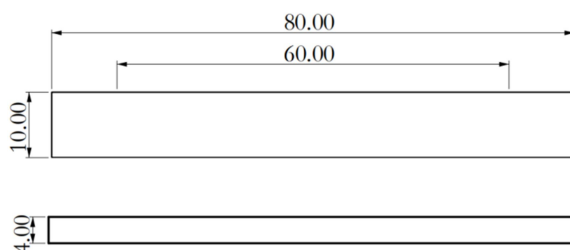
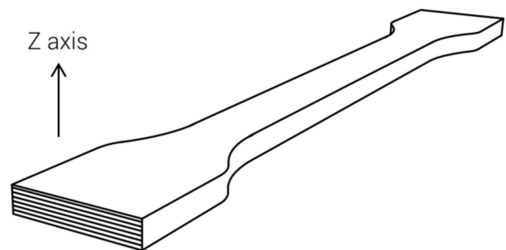
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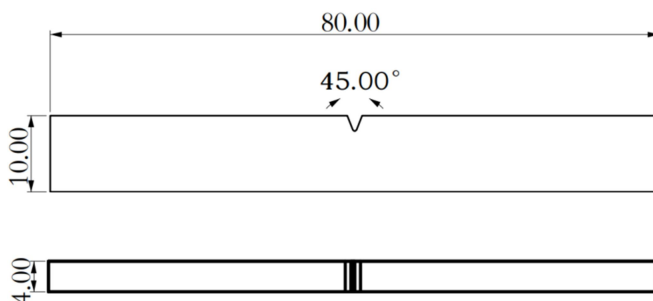
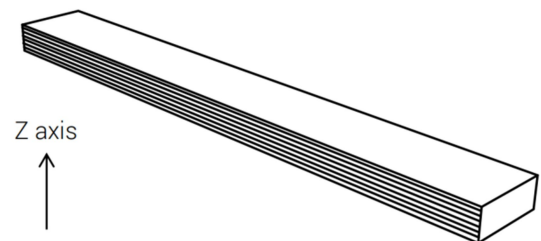
Attachment: Test sample dimensions and printing direction



Tensile testing specimen; ASTM D638 (ISO 527, GB/T 1040)



Flexural testing specimen; ASTM D790 (ISO 178, GB/T 9341)



Impact testing specimen; ASTM D256 (ISO 179, GB/T 1043)

