

# PETG

## Technical Data Sheet

With excellent impact resistance, excellent transparency and good processing performance, PETG provides stable and reliable support for your creative 3D printing works, and easily realizes the transformation from idea to finished product.

### Basic Information

Characteristics	• Softly translucent	• Waterproofness
	• High toughness	
	• Chemical resistance	
Applications	• Prototype design	• Architectural decoration
	• Translucent models	
Forming Method	• Filament	
Processing Method	• 3D Printing	

Physical Properties	Testing Method	Data
Density	GB/T 1033	1.27 g/cm <sup>3</sup>
Melt Flow Index	GB/T 3682	20 (250°C/2.16kg)

Thermal Properties	Testing Method	Data
Heat Distortion Temperature	GB/T 1634	64 °C (0.45Mpa)
Glass Transition Temperature		N/A
Continuous Service Temperature	IEC 60216	N/A
Maximum (short term) Use Temperature		N/A

Electrical Properties	Testing Method	Data
Insulation Resistance	DIN IEC 60167	N/A
Surface Resistance	DIN IEC 60093	N/A

Mechanical Properties	Testing Method	Data
Tensile Strength (X-Y)	GB/T 1040	34.77 Mpa
Tensile Strength (Z)	GB/T 1040	28.65 MPa
Elongation at Break (X-Y)	GB/T 1040	5.15 %
Elongation at Break (Z)	GB/T 1040	3.91 %
Flexural Strength (X-Y)	GB/T 9341	41.9 MPa
Flexural Strength (Z)	GB/T 9341	39.9 Mpa
Flexural Modulus (X-Y)	GB/T 9341	1228.33 MPa
Flexural Modulus (Z)	GB/T 9341	1276.45 Mpa
IZOD Impact Strength (X-Y)	GB/T 1843	4.86 KJ/m <sup>2</sup>
IZOD Impact Strength (Z)	GB/T 1843	1.78KJ/m <sup>2</sup>

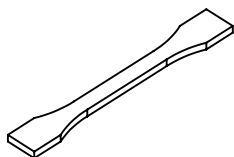
Chemical Properties	Data
Acid and Alkali Resistance	N/A
Grease Resistance	N/A
UV Resistance	YES
Water Repellency	YES

Recommended Printing Parameters	Data
Drying Preparation	60°C > 8H
Nozzle Size	0.2,0.4,0.6,0.8mm
Nozzle Temperature	230-260°C
Build Platform Type	PEI
Build Platform Temperature	75-90°C
Fan Speed	100%
Printing Speed	< 150mm/s

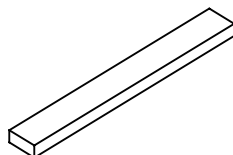
## Printing Tips

When slicing, it is best to turn on the Z seam alignment and starting point alignment functions, turn off the Z-axis lift and exit, avoid passing through the shell when idling, optimize the slicing printing path, and appropriately reduce the printing speed to achieve the best printing effect.

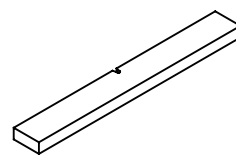
## Test Conditions of Mechanical Properties



Tensile testing specimen GB/T 1040



Flexural testing specimen GB/T 9341



Impact testing specimen GB/T 1843

The performance of the filament is evaluated based on standard samples printed by eSUN, while the actual printing performance is influenced by various factors such as printer type, printing parameters, and print environment.

## Printing Test Conditions:

Extruder Temperature	260°C
Build Platform Temperature	80°C
Outer Layer Number	2
Top/Bottom Layer Number	3
Infill Density	100%
Fan Speed	100%

\*Based on Bambu P1S 0.4 mm nozzle and Orcaslicer 2.1.0 Beta.

## Notice

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