

PolyLite™ PETG

PolyLite™ PETG is an affordable PETG filament with balanced mechanical properties and ease of printing.

Physical Properties

Property	Testing method	Typical value
Density	ASTM D792 (ISO 1183, GB/T 1033)	1.25 (g/cm3 at 21.5°C)
Glass transition temperature	DSC, 10 °C/min	81 (°C)
Vicat Softening temperature	ASTM D1525 (ISO 306 GB/T 1633)	84 (°C)
Melt index	220 °C, 2.16 kg	3.9 (g/10 min)
Melt index	240 °C, 2.16 kg	10.8 (g/10 min)

Tested with 3D printed specimen of 100% infill

Mechanical Properties

Property	Testing method	Typical value
Young's modulus (X-Y)	ASTM D638 (ISO 527, GB/T 1040)	1472 ± 270 (MPa)
Tensile strength (X-Y)	ASTM D638 (ISO 527, GB/T 1040)	31.9 ± 1.1 (MPa)
Elongation at break (X-Y)	ASTM D638 (ISO 527, GB/T 1040)	6.8 ± 0.9 (%)
Bending modulus	ASTMD790 (ISO 178, GB/T 9341)	1174 ± 64 (MPa)
Bending strength	ASTMD790 (ISO 178, GB/T 9341)	53.7 ± 2.4 (MPa)
Charpy impact strength	ASTM D256 (ISO 179, GB/T 1043)	5.1 ± 0.3 (kJ/m²)

All testing specimens were printed under the following conditions:

nozzle temperature = 240 °C, printing speed = 45 mm/s, build plate temperature = 80 °C, infill = 100%

Recommended printing conditions

230 - 240 (°C)
Glass, BuildTak® (recommended)
None
70-80 (°C)
Turned on
30-50 (mm/s)
0.14 (mm)
1-3 (mm)
20 - 80 (mm/s)
Room temperature
60 (°)
None

Based on 0.4 mm nozzle and Simplify 3D v.4.0. Printing conditions may vary with different nozzle diameters

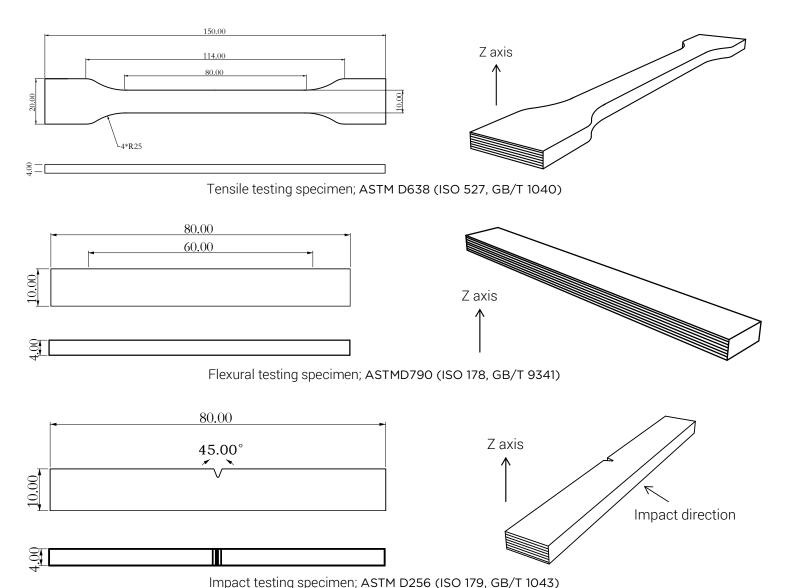
All specimens were conditioned at room temperature for 24h prior to testing





Technical Data Sheet

Version 4.0



Disclaimer:

The typical values presented in this data sheet are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End- use performance of printed parts depends not only on materials, but also on part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

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