TECHNICAL DATA SHEET
Prusament PETG by Prusa Polymers

PETG is one of the most commonly used filaments. It is an excellent choice for printing mechanically stressed parts. Compared to PLA, it is more heat resistant, more flexible and less brittle.

APPLICATIONS: The typical use of PETG is printing functional and mechanical parts. Thanks to good layer adhesion it is also suitable for waterproof prints.

NOT SUITABLE FOR: Not suitable for tiny parts

POST-PROCESSING: When post-processing PETG, it's possible to use both dry and wet sanding.

IDENTIFICATION:

Trade name	Prusament PETG
Chemical name	Copolyester
Usage	FDM 3D printing
Diameter	1.75 ± 0.02 mm
Manufacturer	Prusa Polymers, Prague, Czech Republic

RECOMMENDED PRINT SETTINGS:

Nozzle Temperature [°C]	250 ± 10
Heatbed Temperature [°C]	80 ± 10
Print Speed [mm/s]	up to 200

TYPICAL MATERIAL PROPERTIES:

Physical Properties	Typical Value	Method
Specific Gravity [g/cm3]	1.27	ISO 1183
Moisture Absorption 24 hours [%](1)	0.2	Prusa Polymers
Moisture Absorption 7 days [%](1)	0.3	Prusa Polymers
Moisture Absorption 4 weeks [%](1)	0.3	Prusa Polymers
Heat Deflection Temperature (0,45 MPa) [°C]	68	ISO 75
Tensile Yield Strength Filament [MPa]	46 ± 1	ISO 527

MECHANICAL PROPERTIES OF PRINTED TESTING SPECIMENS(2):

Property / print direction	Horizontal	Vertical X,Y-Axis	Vertical Z-Axis	Method
Tensile Yield Strength [MPa]	47 ± 2	50 ± 1	30 ± 5	ISO 527-1
Tensile Modulus [GPa]	1.5 ± 0.1	1.5 ± 0.1	1.4 ± 0.1	ISO 527-1
Elongation at Yield Point [%]	5.1 ± 0.1	5.1 ± 0.1	2.5 ± 0.5	ISO 527-1
Impact Strength Charpy(3) [kJ/m2]	NB(C)(4)	NB(4)	5 ± 1	ISO 179-1

(1) 30 °C; humidity 30 %

(2) Original Prusa i3 MK3 3D printer was used to make testing specimens. Slic3r Prusa Edition 1.40.0 was used to create G-codes with following settings:Prusa PETG Filament; Print settings 0,20mm FAST (layers 0,2mm); solid layers Top:0 Bottom:0; Infill 100% Rectilinear, infill print speed 100mm/s; extrusion multiplier 1.07; extruder temperature 260°C all layers; bed temperature 90°C all layers; other parameters set default

(3) Charpy unnotched - Edgewise direction of blow according to ISO 179-1

(4) NB (no break); C (complete break) in brackets second most frequent type of failure > 1/3

Dislamer

The results presented in this data sheet are just for your information and comparison. Values are significantly dependent on print settings, operators experiences and surrounding conditions. Everyone have to consider suitability and possible consequences of printed parts usage. Prusa Polymers can not carry any responsibility for injures or any loss caused by using of Prusa Polymers material.

VERTICAL X,Y-AXIS

VERTICAL Z-AXIS

HORIZONTAL