BCN3D FILAMENTS

PET-G

Description

PET-G (Polyethylene terephthalate glycol-modified) is a globally used copolyester, from plastic water bottles to cloth fibers and it is 100% recyclable.
As a technical material, PET-G provides good mechanical properties and improved chemical and thermal behaviours than PLA but with similar ease of use.

Properties

- Outstanding chemical resistance
- Great dimensional stability and toughness
- Good glossy surface quality
- Good abrasion resistance
- High humidity resistance
- Operating temp. up to 70°C
- Low rate of ultrafine particles (UFP) and volatile organic compounds (VOC)
- Compatible with PVA supports

Recomendations

Plastics absorb moisture from the air, it is recommended to keep the PET-G spools in a box or airtight container with desiccant to keep them dry.
For a better print quality use an enclosure.
PET-G emits low levels of gasses and particles when printed. We recommend printing it in a well-ventilated area.

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PET-G - *Technical information including:*

Mechanical properties		
	Typical value	Test method
MFR 190°C/2,16kg	6.4 gr/10 min	ISO 1133
Tensile strength at yield	50.4 Mpa	ISO 527
Strain at yield	5.9%	ISO 527
Strain at break	22.7%	ISO 527
Tensile Modulus	2020 MPa	ISO 527
Flexural modulus	2050 Mpa	ISO 178
Flexural strength	69 MPa	ISO 178
Impact strength-Charpy method 23 °C	8,1 kJ/m²	ISO 179
Rockwell Hardness	105	ASTM D785
Moisture absorption	1104 ppm	ISO 62

Thermal properties		
	Typical valueT	est method
Heat Deflection Temp	70 °CA	STM 648
Transparency	90 %	ASTM D1003

Filament specifications	
Diameter	Ø 2.85 mm
Max roundness deviation	≥ 95%
Net filament weight	750 g
Specific gravity (ISO 1183)	1.27 g/cc

Printing settings	
Extruder temperature	235 °C - 250 °C
Bed temperature8	0 °C
Speed	25-50 mm/s
Retraction speed	60 mm/s
Retraction distance	5 mm
Cooling fan	Up to 60 %
Minimum layer height	0.1 mm