

## TECHNICAL DATA SHEET

### Spectrum Filaments PET-G HT100

The material offered by Spectrum Group Sp. z o.o. has been developed and adapted to general modeling. Tests performed by Spectrum Group Sp. z o.o. have showed that it is feasible to use the offered product in most 3D printers operating in FDM/FFF technology. Before the first use, it is advisable to print out a hard proof to check if the filament is compatible with user's printer. All shown data are typical properties. The information were processed with the best knowledge of the manufacturer and it is for information only. Users should confirm results by their own tests.

Identification	
Trade name	Spectrum Filaments PET-G HT100
Chemical name	Copolyester
Use	Additive Manufacturing
Origin	Spectrum Group Sp. z o.o.

Filament specification	
Diameter	1.75mm ± 0.05mm
Verify your spool	Yes

Material properties		
Properties	Typical value	Test method
Density	1.18 g/cm <sup>3</sup>	D792
Tensile Stress at Yield	43 MPa	D638
Tensile Stress at Break	52 MPa	D638
Elongation at Yield	7%	D638
Elongation at Break	210%	D638
Flexural Modulus	1575 MPa	D790
Flexural Strength	64 MPa	D790
Rockwell Hardness, R Scale	111	D785
Izod Impact Strength, notched	860 J/m (@23°C)	D256
Impact Strength, unnotched	NB (@23°C)	D4812
Deflection Temperature	94°C @ 0.455 MPa	D648
Deflection Temperature	81°C @ 1.82 MPa	D648

#### Guideline for print settings\*

Nozzle temperature	250 - 280°C
Bed temperature	100-110°C
Active cooling fan	Yes (up to 100%)
Layer height**	0.10 - 0.25mm
Shell thickness**	0.40-1.60mm
Print speed**	30-70mm/s
Bed adhesive	3DLac, Dimafix, glue stick
Heated chamber	recommended

\* settings are based on a 0.4mm nozzle

\*\* the range depends on the geometrical complexity

#### Key features:

- High temperature resistance (up to 100°C)
- High dimensional stability
- High mechanical strength
- Excellent toughness
- Chemical resistance
- Styrene-free
- FDA compliance
- BPA-free
- Clarity and gloss
- Low odor