

TECHNICAL DATA SHEET

Spectrum Filaments PET-G FX120

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 FX120 |
| 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 | 1.13 g/cm ³ | D792 |
| Tensile Stress at Yield | 14 MPa | D638 |
| Tensile Stress at Break | 22 MPa | D638 |
| Elongation at Yield | 38% | D638 |
| Elongation at Break | 400% | D638 |
| Flexural Modulus | 150 MPa | D790 |
| Tear Strength | 350 N | D1004 |
| Brittleness temperature | <70°C | D746 |
| Izod Impact Strength, notched | 40 J/m (@-40°C) | D256 |
| Vicat Softening Temperature | 170°C | D1525 |
| Heat Deflection Temperature | 120°C | N/A |
| Hardness (Shore A) | 95A | D2240 |
| Hardness (Shore D) | 55D | D2240 |

Guideline for print settings*

| | |
|--------------------|--------------------------|
| Nozzle temperature | 240 - 260°C |
| Bed temperature | 80°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, buildTak |
| Heated chamber | recommended |

* settings are based on a 0.4mm nozzle

** the range depends on the geometrical complexity

Key features:

- Dimensional stability
- Chemical resistance to lubricants and oils
- Excellent temperature resistance
- Excellent durability
- Low odour
- Steam sterilizable
- Styrene-free
- 95A Shore hardness