Spectrum FILAMENTS

TECHNICAL DATA SHEET

PET-G FX120

MATERIAL PROPERTIES

Specific Gravity	1.13 g/cm³	D 792
Mechanical Properties		
Tensile Stress @ Yield	14 MPa	D 638
Tensile Stress @ Break	22 MPa	D 638
Elongation @ Yield	38,00%	D 638
Elongation @ Break	400,00%	D 638
Flexural Modulus	150 MPa	D 790
Tear Strength	350 N	D 790
Izod Impact Strength, Notched @ -40°C	40 J/m	D 256
Durometer Hardness		
Shore D Scale	55	D 2240
Shore A Scale	95	D 2240
Thermal Properties		
Brittleness Temperature	≤ 70°C	D 746
Vicat Softening Temperature	170°C	D 1525

GUIDELINE FOR PRINT SETTINGS*

Nozzle temperature	240-260°C
Bed temperature	80°C
Active cooling fan	10 - 30%
Layer height**	0.05 - 0.30 mm
Shell thickness**	0.40 – 2.70 mm
Print speed**	30-70 mm/s
Closed chamber	recommended
Dry box	not necessary
Ruby or hardened nozzle	not necessary

* settings are based on a 0,4 mm nozzle.
** depending on the geometrical complexity

Disclaimer
The product- and technical data provided in this datasheet is correct to the best of Spectrum Group Sp. z o.o. knowledge and are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary according to printing conditions, model complexity, environmental conditions, etc. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications. Spectrum Group Sp. z o.o. shall not be made liable for any damage, injury or loss induced from the use of Spectum Group Sp. z o.o. materials in any particular application.

DESCRIPTION

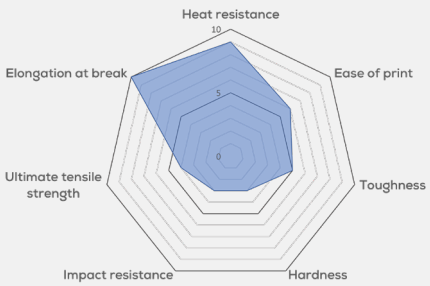
Spectrum PET-G FX 120 is a flexible material, designed especially for engineering applications requiring both the durability of an engineering-class polymer and strength, enabling designers to create rapidly truly functional parts to withstand normal use. Spectrum PET-G FX120 belongs to the group of rigid elastomers. As a result, it can be effectively used not only on 3D printers with direct drive mechanism but also on devices with a Bowden filament.

FEAUTURES

- Dimensional stability
- Improved aesthetics
- Excellent temperature resistance
- Excellent durability
- A wide processing range
- Low odour
- Properties retained in 3D applications
- Possibility to steam sterilise
- Styrene-free
- 95A Shore hardness

STORAGE AND SHELF LIFE

Filament should be stored in a dry room at room temperature. Recommended storage temperature is ca. 18-25°C (64.4 -77.0°F). Keep out of moisture, sunlight and direct heat. When stored properly, product has a shelf life of 24 months.



SUPPORT

If you have any questions or experience any issues, please do not hesitate to contact us at **support@spectrumfilaments.com**