

Pellet ASA Kevlar

MATERIAL PROPERTIES

Specific Gravity, 23°C	1.07 g/cm ³	ASTM D792
Melt Flow Rate, 220°C, 10kg	5 g/10min	ASTM D1238

Mechanical Properties

Tensile Strength, at Yield, 23°C *	42 MPa	ASTM D638
Tensile Elongation at Break, 23°C *	35% (Min)	ASTM D638
Tensile Modulus, 23°C *	1800 MPa	ASTM D638
Flexural Strength, 23°C **	64 MPa	ASTM D790
Flexural Modulus, 23°C **	1900 MPa	ASTM D790
Izod Impact Strength, Notched, 3.2mm, 23°C	435 J/m	ASTM D256
Izod Impact Strength, Notched, 3.2mm, -30°C	60 J/m	ASTM D256
Rockwell Hardness, R-Scale	92	ASTM D785

Thermal Properties

Heat Deflection Temperature	86°C	ASTM D648
VICAT, 50N, 50°C/h	94°C	ASTM D1525
Flammability, 1.5mm	HB	UL 94
Flammability, 3.0mm	HB	UL 94

* 50mm/min, 3.2mm

** 15mm/min, 3.2 mm

GUIDELINE FOR PRINT SETTINGS*

Nozzle temperature	200-240°C
Bed temperature	40-60°C
Active cooling fan	0 - 20%
Closed chamber	recommended for larger prints
Dry box	not necessary
Ruby or hardened nozzle	not necessary

* settings are based on a 0,4 mm nozzle.

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 Spectrum Group Sp. z o.o. materials in any particular application.

DESCRIPTION

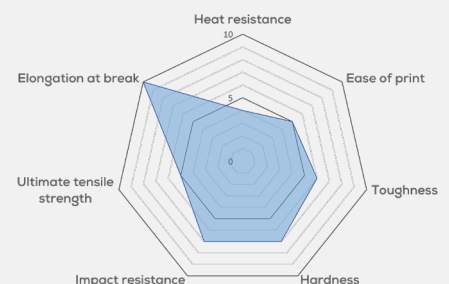
Spectrum FGF Pellet ASA Kevlar is a technical composite material based on a combination of ASA copolymer and aramid fibres. The aim of producing composite materials by combining different types materials is to impart new properties, previously unattainable for separate components. As a base for the composite, we used the ASA copolymer, well known for its high resistance to weather conditions, combining it with aramid, which is used to make some of the strongest synthetic fibres.

FEAURES

- excellent resistance to external exposure and changing weather conditions
- resistance to UV radiation
- perfect interlayer adhesion
- ability to print on desktop printers without a heated chamber
- high speed printing (up to 200mm/s)
- glossy print surface

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