Spectrum FILAMENTS

TECHNICAL DATA SHEET

ASA-X CF10

MATERIAL PROPERTIES

Specific Gravity	1.1 g/cm³	ISO 1183
Mechanical properties		
Charpy impact strength, unnotched*	8 ft.lb/in²	ISO 179-1eU
Charpy impact strength, notched*	2.57 ft.lb/in²	ISO 179-1eA
Tensile Elongation at Break*	1,80%	ISO 527 (1)
Tensile Strength at Break*	79 MPa	ISO 527 (1)
Elastic modulus tensile*	7580 MPa	ISO 527 (1)
Thermal properties		
VICAT Softening point*	101,6°C	ISO 306
Heat Deflection Temperature		
66 psi*	100,5°C	ISO 75
264psi*	95°C	ISO 75
Electrical properties		
surface	1e2 ohm	ASTM D257

*injection moulding

GUIDELINE FOR PRINT SETTINGS*

Nozzle temperature	235-260°C
Bed temperature	90-110°C
Active cooling fan	0-20%
Layer height**	0.05-0.30 mm
Shell thickness**	0.40–2.70 mm
Print speed**	30-70 mm/s
Closed chamber	not necessary
Dry box	not necessary
Ruby or hardened nozzle	recommended

* 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

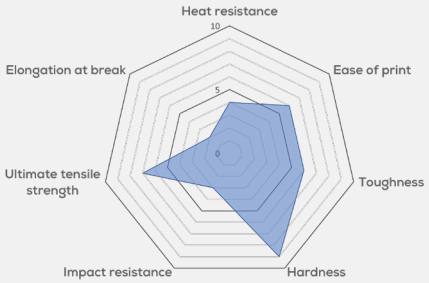
Spectrum ASA-X CF10 - composite material based on an appropriately selected ASA with carbon fibre filling. It is resistant to external exposure, such as sunlight (UV) and humidity (hydrolysis). At the same time, Spectrum ASA-X CF10 has low shrinkage and is, unusually for technical materials with comparable properties, easy to print. All of this, combined with a carbon matt surface that effectively masks the layers.

FEAUTURES

- carbon fibers reinforced (10%)
- excellent resistance to outdoor exposure
- UV resistance
- printable on desktop printers without a heated chamber
- carbon, matt printed surface
- perfect bonding of the layers

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**