

## **TECHNICAL DATA SHEET**

# ASA-X GF10

#### **MATERIAL PROPERTIES**

Density	1.11 g/cm <sup>3</sup>	ISO 1183
Mechanical properties		
Charpy impact strength*		
unnotched (at 23°C)	25 kJ/m²	ISO 179-1eU
notched (at 23°C)	8.3 kJ/m <sup>2</sup>	ISO 179-1eA
Tensile Elongation*		
At yield	2.80%	ISO 527 (1)
Tensile Strength*		
At break	55 MPa	ISO 527 (1)
Elastic modulus tensile* (speed 1mm/min)	2550 MPa	ISO 527 (1)
Thermal properties		
VICAT Softening point	98°C	ISO 306
Heat Deflection Temperature		
0.45mn/m2*	100°C	ISO 75
1.81mn/m2*	90°C	ISO 75

<sup>\*</sup>injection moulding

#### **GUIDELINE FOR PRINT SETTINGS\***

Nozzle temperature	240 - 270°C	
Bed temperature	80 - 100°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	

<sup>\*</sup> settings are based on a 0.5mm 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 Spectum Group Sp. z o.o. materials in any particular application.

#### DESCRIPTION

ASA-X GF10 filament is an advanced composite material. Based on a glass fiber reinforced ASA polymer provides excellent mechanical strength and hardness, making printed parts resistant to loads and prolonged exposure to UV radiation and moisture.

#### **FEAUTURES**

- 10% glass fiber
- excellent resistance to outdoor exposure
- UV resistance
- printable on desktop printers without a heated chamber
- 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



<sup>\*\*</sup> depending on the geometrical complexity