

# ASA-X CF10

## MATERIAL PROPERTIES

|                                    |                            |             |
|------------------------------------|----------------------------|-------------|
| Specific Gravity                   | 1.1 g/cm <sup>3</sup>      | ISO 1183    |
| <b>Mechanical properties</b>       |                            |             |
| Charpy impact strength, unnotched* | 8 ft.lb/in <sup>2</sup>    | ISO 179-1eU |
| Charpy impact strength, notched*   | 2.57 ft.lb/in <sup>2</sup> | 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) |
| <b>Thermal properties</b>          |                            |             |
| VICAT Softening point*             | 101,6°C                    | ISO 306     |
| Heat Deflection Temperature        |                            |             |
| 66 psi*                            | 100,5°C                    | ISO 75      |
| 264psi*                            | 95°C                       | ISO 75      |
| <b>Electrical properties</b>       |                            |             |
| 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

## DESCRIPTION

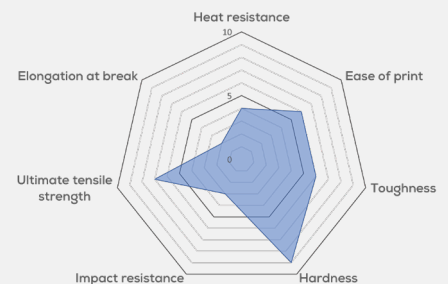
Spectrum ASA-X CF10 - composite material based on an appropriately selected ASA with carbon fibre filling. It is resistant to external exposure, such as sunlight (UV) and humidity (hydrolysis). At the same time, Spectrum ASA-X CF10 has low shrinkage and is, unusually for technical materials with comparable 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](mailto:support@spectrumfilaments.com)