

CARBON FIBRE REINFORCED ASA

# ASA-CF Filament

1.75 mm · 1 kg spool · ±0.05 mm tolerance

Carbon fibre reinforced ASA combining outdoor UV and weather resistance with low warping and a refined matte finish.

- ✓ UV and weather resistant
- ✓ Carbon fibre reinforced
- ✓ Matte textured finish
- ✓ Hardened steel nozzle required

## Recommended Print Settings

|                    |                                     |
|--------------------|-------------------------------------|
| Nozzle temperature | 250–280 °C<br>270 °C recommended    |
| Bed temperature    | 100–120 °C<br>110 °C recommended    |
| Print speed        | 40–60 mm/s<br>50 mm/s recommended   |
| Support material   | HIPS, ASA-CF (as support interface) |

*Use an enclosed printer and a hardened steel nozzle.*

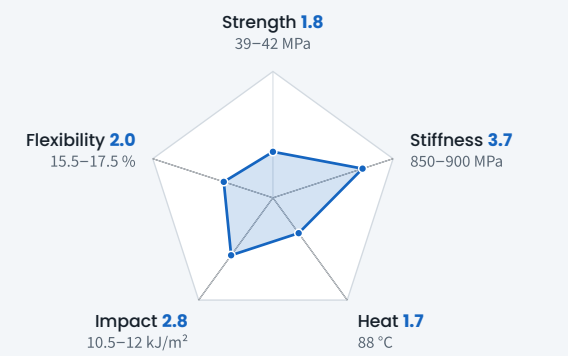
## Filament Specifications

|                     |                             |
|---------------------|-----------------------------|
| Material            | Carbon fibre reinforced ASA |
| Diameter            | 1.75 mm                     |
| Diameter tolerance  | ±0.05 mm                    |
| Net filament weight | 1 kg                        |

## Spool & Packaging

|                      |                   |
|----------------------|-------------------|
| Empty spool weight   | 150 g             |
| Spool with filament  | 1.15 kg           |
| Spool outer diameter | 200 mm            |
| Hub diameter         | 52 mm             |
| Spool width          | 65 mm             |
| Shipping weight      | 1.3 kg            |
| Box dimensions       | 210 × 220 × 75 mm |

## Property Profile



Scores from 1 to 5 relative to the OzFDM filament range, based on the typical values in this sheet (stiffness and impact on a log scale).

## Storage & Handling

- Drying

80 °C for a minimum of 5 hours in a filament dryer or food dehydrator.
- Storage

Airtight bag or container with desiccant in a cool, dark and dry area to prevent moisture absorption. For optimal long term storage we recommend drying the filament prior to sealing the filament spool in a vacuum bag with desiccant.

### Mechanical Properties

| PROPERTY            | TEST METHOD | TYPICAL VALUE             |
|---------------------|-------------|---------------------------|
| Tensile strength    | ISO 527     | 39–42 MPa                 |
| Elongation at break | ISO 527     | 15.5–17.5 %               |
| Tensile modulus     | ISO 527     | 850–900 MPa               |
| Flexural strength   | ISO 178     | 80–82.5 MPa               |
| Impact strength     | ISO 180     | 10.5–12 kJ/m <sup>2</sup> |

### Physical Properties

| PROPERTY                          | TEST METHOD | TYPICAL VALUE               |
|-----------------------------------|-------------|-----------------------------|
| Density                           | ISO 1183    | 1.09–1.10 g/cm <sup>3</sup> |
| Melt flow rate                    | ISO 1133    | 4–7 g/10min                 |
| Moisture absorption (23 °C, 24 h) | ISO 62      | <0.5 %                      |

### Thermal Properties

| PROPERTY                                | TEST METHOD | TYPICAL VALUE |
|-----------------------------------------|-------------|---------------|
| Heat deflection temperature (0.455 MPa) | ISO 75      | 88 °C         |
| Continuous use temperature              | IEC 60216   | 85 °C         |

### Available Colours 4



Carbon Fibre  
Black



Midnight Blue



Carbon Fibre  
Red



Iris Purple

Swatches are indicative only. Colours vary between screens and with print settings.

**NOTES**

Values shown are typical results measured on test specimens and are provided for guidance only. They are not guaranteed specifications and should not be used as design limits. Printed part properties vary with printer, settings, print orientation and part geometry. Test your parts for suitability before use in critical applications.