Technical data sheet
PA12 CF15

2023-07-03

Filament: PA12 CF15 (carbon fiber).

Brand name: filalab www.filalab.lt

Usage: 3D filament for FDM 3D printers.

Manufacturer: UAB filalab, Vilnius, Lithuania.

Printing recommendations:

Bed temperature: °C ± 110°C

Extruder temperature: 260°C – 280°C

Bed temperature: 80°C – 95 °C (glue is recommended)

Speed: 40 mm/s – 60 mm/s

Diameter tolerance: 1.75 mm ± 0.03 mm

Material Properties

Physical properties:

Basic properties	Value	Method
Relative Viscosity (96% H_2SO_4)	4.05	JIS K6810
Density	1,03 g/cm3	ISO 1183
Melting point	188 C	ISO 11357

Mechanical properties:

Physical properties	Method	Value
CHARPY impact strength (sample 80x10x4 cm) Unnotched, as printed Notched, as printed	 ISO 179-1eU ISO 179-1eA	 55 kJm2 14 kJ/m2
Tensile Strength at Break as printed	ISO 527 (1)	50 MPa
Tensile Elongation at Break as printed	ISO 527 (1)	7 %
Elastic Modulus	ISO 527 (1)	3650 MPa
Softening point	ISO 306	168 Celcium

Note:

Data were obtained by a few lots of materials and are subjected to variations. Specimens are printed under the following conditions: angle 45°, infill 100%. The above-listed properties may be subjected to variations and therefore can not be adopted as specifications. In addition, the same properties may be influenced by several factors, like manufacturing techniques used and the size and the shape ofthe part. Therefore, the contents of this publication does not imply that all the parts will have the same properties as indicated in the data sheet itself.