

ENGINEERING POLYCARBONATE

Polycarbonate (PC) Filament

1.75 mm · 1 kg spool · ± 0.05 mm tolerance

Polycarbonate for strong, tough parts that need to hold their shape at elevated temperatures.

✓ HDT 123 °C

✓ High strength and toughness

✓ Bed 100–120 °C

✓ Enclosure recommended

Recommended Print Settings

Nozzle temperature 240–260 °C
250 °C recommendedBed temperature 100–120 °C
110 °C recommendedPrint speed 40–60 mm/s
50 mm/s recommended

Support material PC (self supported)

 Use an enclosed printer to limit warping and layer separation.

Filament Specifications

Material Polycarbonate (PC)

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

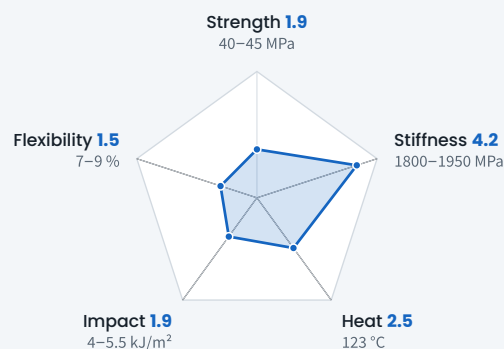
Hub diameter 52 mm

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 12 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	40–45 MPa
Elongation at break	ISO 527	7–9 %
Tensile modulus	ISO 527	1800–1950 MPa
Flexural strength	ISO 178	83–87 MPa
Impact strength	ISO 180	4–5.5 kJ/m²

Physical Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ISO 1183	1.20–1.21 g/cm³
Melt flow rate (240 °C, 2.16 kg)	ISO 1133	3–5 g/10min
Moisture absorption (23 °C, 24 h)	ISO 62	<0.8 %

Thermal Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Heat deflection temperature (0.455 MPa)	ISO 75	123 °C
Continuous use temperature	IEC 60216	130 °C

Available Colours 3



Natural



Black



White

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.