POLYCARBONATE AND ABS BLEND

PC-ABS Filament

1.75 mm · 1 kg spool · ±0.05 mm tolerance

Polycarbonate and ABS blend for tough parts that handle heat, repeated use and mechanical stress.

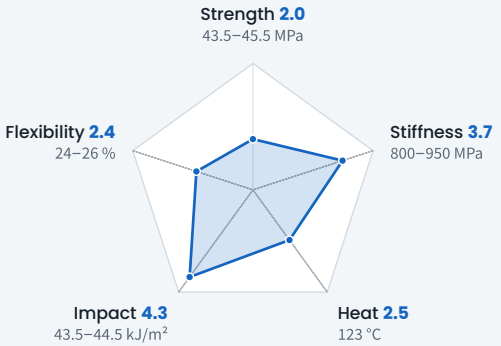
- HDT 123 °C
- Very high impact strength
- Elongation 24–26 %
- Enclosure recommended

Recommended Print Settings

Nozzle temperature	250–280 °C 265 °C recommended
Bed temperature	90–110 °C 100 °C recommended
Print speed	40–60 mm/s 50 mm/s recommended
Support material	HIPS

Use an enclosed printer with a heated bed.

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).

Filament Specifications

Material	Polycarbonate and ABS blend
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

Storage & Handling

Drying

80 °C for a minimum of 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.

Annealing

Anneal finished parts at 100 °C for 1–3 hours to increase strength.

Mechanical Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Tensile strength	ISO 527	43.5–45.5 MPa
Elongation at break	ISO 527	24–26 %
Tensile modulus	ISO 527	800–950 MPa
Flexural strength	ISO 178	71.5–74.5 MPa
Impact strength	ISO 180	43.5–44.5 kJ/m²

Physical Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ISO 1183	1.14–1.15 g/cm³
Melt flow rate (260 °C, 5 kg)	ISO 1133	19–22 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

Black White Natural

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.