

ENGINEERING NYLON

PA6 Nylon Filament

1.75 mm · 1 kg spool · ± 0.05 mm tolerance

Tough, wear resistant nylon for functional parts that flex, slide or take repeated impact, such as gears, hinges and clips.

✓ Very high impact strength

✓ Wear and abrasion resistant

✓ Elongation 32–36 %

✓ Dry thoroughly before use

Recommended Print Settings

Nozzle temperature 240–280 °C
270 °C recommended

Bed temperature 80–110 °C
100 °C recommended

Print speed 40–60 mm/s
50 mm/s recommended

Support material PA6 (self supported), PVA

i Nylon absorbs moisture quickly. Dry before printing and use an enclosed printer to limit warping.

Filament Specifications

Material Nylon 6 (PA6)

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

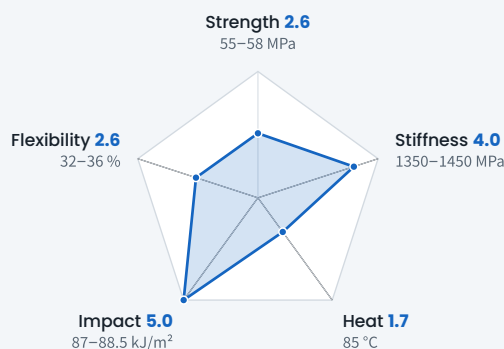
Hub diameter 52 mm

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 12 hours in a filament dryer or food dehydrator. We recommend 80 °C for 24 hours as we found it was still stringing a little after 12 hours, depending on your type of dryer.

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	55–58 MPa
Elongation at break	ISO 527	32–36 %
Tensile modulus	ISO 527	1350–1450 MPa
Flexural strength	ISO 178	84–87 MPa
Impact strength	ISO 180	87–88.5 kJ/m ²

Physical Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ISO 1183	1.12–1.14 g/cm ³
Melt flow rate	ISO 1133	2–5 g/10min
Moisture absorption (23 °C, 24 h)	ISO 62	1.6–1.9 %

Thermal Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Heat deflection temperature (0.455 MPa)	ISO 75	85 °C

Available Colours 2



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.