

OUTDOOR ENGINEERING FILAMENT

ASA Filament

1.75 mm · 1 kg spool · ± 0.05 mm tolerance

Weather and UV resistant engineering filament for outdoor parts that need to keep their shape and colour.

✓ UV and weather resistant

✓ HDT 88 °C

✓ Impact strength 19–20 kJ/m²

✓ Enclosure recommended

Recommended Print Settings

Nozzle temperature	240–260 °C 250 °C recommended
Bed temperature	100–120 °C 110 °C recommended
Print speed	40–60 mm/s
Support material	HIPS, ASA (self supported)

 Use an enclosed printer to limit warping on larger parts.

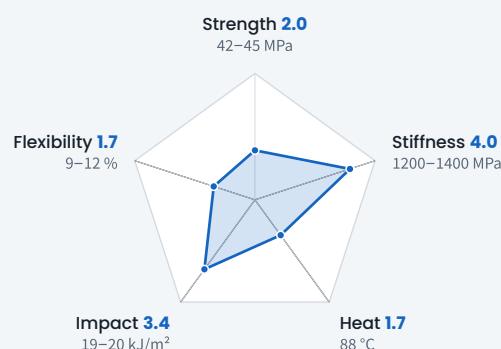
Filament Specifications

Material	Acrylonitrile styrene acrylate (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	42–45 MPa
Elongation at break	ISO 527	9–12 %
Tensile modulus	ISO 527	1200–1400 MPa
Flexural strength	ISO 178	75–79 MPa
Impact strength	ISO 180	19–20 kJ/m ²

Physical Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ISO 1183	1.08–1.09 g/cm ³
Melt flow rate (220 °C, 10 kg)	ISO 1133	20–25 g/10min
Moisture absorption (23 °C, 24 h)	ISO 62	1 %

Thermal Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Heat deflection temperature (0.455 MPa)	ISO 75	88 °C

Available Colours 15

							
Black	White	Natural	Grey	Silver	Red	Green	Blue
							
Purple	Pink	Rose	Bright Gold	Yellow	Orange	Brown	

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.