FLAME RETARDANT ABS

ABS-FR Filament

1.75 mm · 1 kg spool · ±0.02 mm tolerance

Flame retardant ABS rated UL 94 V-0 at 1.5 mm, for housings and enclosures used near heat sources or electrical components.

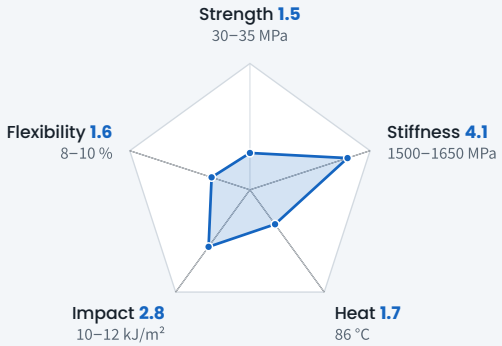
- UL 94 V-0 (1.5 mm)
- Self-extinguishing
- HDT 86 °C
- Enclosure recommended

Recommended Print Settings

Nozzle temperature	230–250 °C
Bed temperature	100–120 °C
Print speed	40–200 mm/s
Support material	HIPS, ABS-FR (self supported)

Use an enclosed printer and a heated bed to limit warping and cracking.

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	Flame retardant ABS
Diameter	1.75 mm
Diameter tolerance	±0.02 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 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	30–35 MPa
Elongation at break	ISO 527	8–10 %
Tensile modulus	ISO 527	1500–1650 MPa
Flexural strength	ISO 178	55–60 MPa
Impact strength	ISO 180	10–12 kJ/m²

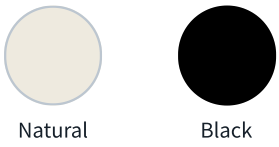
Physical Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Density	ISO 1183	1.19–1.20 g/cm³
Melt flow rate (220 °C, 5 kg)	ISO 1133	10–15 g/10min
Moisture absorption (23 °C, 24 h)	ISO 62	1 %
Flame rating	UL 94	V-0 (1.5 mm)

Thermal Properties

PROPERTY	TEST METHOD	TYPICAL VALUE
Heat deflection temperature (0.455 MPa)	ISO 75	86 °C

Available Colours 2



Natural Black

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.