



### APPLICATIONS

The combination of a precise dosage of aramid fibers and selecting their size provide excellent features of ABS parts printed without nozzle clotting. The abrasive phenomenon is less important compared to the corresponding carbon fibers composites. Printing settings are compatible with most 3D printers equipped with heating plate.

**Advantages:** light printed parts. Low warping during printing. Increased resistance to friction and shocks. The printed parts are less brittle than carbon ABS parts. Weakly flammable fibers (degradation > 500 ° C). The aramid fibers are UV and moisture sensitive.

[More information](#)

### HEALTH & SAFETY

**ABS-KEVLAR500 ARMOR** filaments are not hazardous for health. However, as short fibers and dust, in case of peeling or sanding, ABS filament may cause skin, eyes and respiratory tract irritation. Moreover, the low size of fibers can cause sometimes allergies. Users must wear individual protection equipment (mask, gloves...) in case of sanding or milling the printed pieces. Consult MSDS for more data.

ABS can lead to COV production during printing process (styrene derivatives). Ensure a working area equipped with air extraction or suitable protection. Always refers to MSDS prior handling.

[More information](#)

### Featured Object:



ABS-KEVLAR500 ARMOR available in 2 diameters

### Packaging



Spools packed in individual boxes, under vacuum with desiccant. Product supplied with batch number and material traceability. Spools of 300g, 750g and 2.2kg are available on our store. Other spools are available on request (up to 25 kg).

Product Information	Units	Method	Result
Printing Temperature	[°C]	-	250 - 270
Plateform Temperature	[°C]	-	90 - 110
Nozzle	[mm/s]	-	0.5 (>0.4)
Printing Speed	[°C]	-	50 - 70
Linear Weight Ø 1.75	[g/m]	-	2.50
Linear Weight Ø 2.85	[g/m]	-	6.50
Thermal and Mechanical Properties	Units	Method	Result
Tg	[°C]	-	101
DTUL	[°C]	-	90
Flammability	[UL 94@1.6mm]	-	HB
Density	[g/cm³]	ISO 1183	1.08
Tensile Modulus	[Mpa]	ISO 527	2 400
Flexural Modulus	[Mpa]	ISO 178	2 300
Elongation at Break	[%]	ISO 527	7.5
Filler	Units	Norms	Result
Mean Length	µm	-	215
Mono Fiber Diameter	µm	-	10 +/- 2
Fibers > 100 µm	%	-	70
Fibers Population	Unit/g of filament	-	5.0 x E6