

## **ABS**

ABS is an extra strong impact-resistant filament ideal for 3D printing of solid printed products. Due to the process stability and physical features of Acrylonitrile Butadiene Styrene it is a widely used thermoplastic polymer in industry. The material is also very light and durable. This makes ABS particularly suitable for tools, toys and all kinds of ustensils. Printed at a slightly over-average temperature for ABS, this filament gives extra strong 3D print results.

## Material features:

- Very high impact-resistance
- Extra strong
- Stable printing
- Light and durable
- Limited warping



Filament specs.		
Size	Ø tolerance	Roundness
1,75mm	± 0,05mm	≥ 95%
2,85mm	± 0,10mm	≥ 95%

Material properties		
Description	Testmethod	Typical value
Specific gravity	ISO 1183	1,03 g/cc
MFR 220°C/10 kg	ISO 1133	5,7 g/10 min
Tensile strength at yield	ISO 527	38 Mpa
Elongation at break	ISO 527 1/2	9%
Tensile modulus	ISO 527	1900 Mpa
Impact strength - Charpy method 23°C	ISO 179	35 kJ/m2
Printing temp.	eM-T	245±10°C
Melting temp.	ISO 294	245±10°C
Vicat softening temperature	ASTM D 1525	103°C

## Additional info:

Recommended temperature for heated bed is  $\pm$  90-110°C.

ABS is printed at a slightly higher temperature to make the final product extra strong.

ABS can be used on all common desktop FDM or FFF technology 3D printers.

Storage: Cool and dry (15-25°C) and away from UV light. This enhances the shelf life significantly.