

## ABS Extrafill

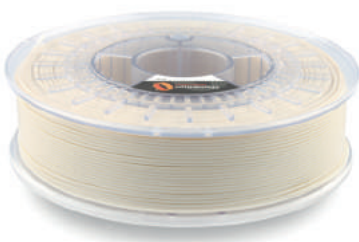
### Description:

Fillamentum ABS Extrafill is a material for the FFF (also known as FDM) 3D printing technology.

The advantage of this material is that it can be used in 3D printers easily, that it allows a high quality of printing even in tricky details and an excellent lamination of the printed object.

ABS filament is a polymer which is ideal for the production of the first functional samples before serial production for functional prototyping, manufacturing tools, but also for the production of goods for everyday use.

Use of the ABS material in the food industry is dependent on the final product and responsibility for use on a processor ABS Extrafill. ABS is not intended for medical applications.



Physical properties	Typical Value	Test Method	Test Condition
Material density	1,04 g/cm <sup>3</sup>	ISO 1183	23 °C
Melt volume index	29 cm <sup>3</sup> /10 min	ISO 1133	220 °C, 10 kg
Diameter tolerance	± 0,05 mm		
Weight	750 g of filament (+ 250 g spool)		

Mechanical properties	Typical Value	Test Method	Test Condition
Tensile strength	32 MPa	ISO 527	50 mm/min
Elongation at break	20 %	ISO 527	50 mm/min
Flexural strength	60 MPa	ISO 178	2 mm/min
Flexural modulus	1900 GPa	ISO 178	2 mm/min
Izod impact strength	24 kJ/m <sup>2</sup>	ISO 180	Method 1A, notched
Charpy impact strength	25 kJ/m <sup>2</sup>	ISO 179	notched
Ball indentation hardness	94	ISO 2039	H358/30

Thermal properties	Typical Value	Test Method	Test Condition
Melting temperature	220-240 °C		
Heat distortion temperature	81 °C	ISO 75	1,8 MPa
Vicat softening temperature	103 °C	ISO 306	50 °C/h, 1 kg
	96 °C	ISO 306	50 °C/h, 5 kg
Flammability	1,5 mm HB	UL 94	
Coefficient of linear thermal expansion	9 · 10 <sup>-5</sup>	ISO 11359	

Printing properties	Typical Value	Test Method	Test Condition
Print temperature	220-240 °C		
Hot pad	90-100 °C		
Speed of printing	30-40 mm/s		

Fillamentum guarantees high precision of filament dimensions within the tolerance of +/- 0,05 mm, which is strictly controlled throughout the production.

Printing filaments reported on the marked under the trademark Fillamentum are produced in a wide variety of colours in accordance with the colour charts RAL and Pantone, and also in own unique colour ranges.

Workability of 3D printing filament is at least 12 months from delivery.

The information was processed with the best knowledge of the manufacturer and it is for information only.