

ABS EXTRAFILL

DESCRIPTION

Fillamentum ABS Extrafill is a material for the FFF (also known as FDM) 3D printing technology. ABS filament is suitable for the production of the first samples before serial production for functional prototyping, manufacturing tools, but also for the production of goods for everyday use.

This material can be used for production of electrical and electronic equipment. It doesn't contain the restricted substances. The use of the material in the food or medi-cal industry is not recommended.

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



PHYSICAL PROPERTIES	TYPICAL VALUE	TEST METHOD	TEST CONDITION
Material density	1,04 g/cm ³	ISO 1183	23 °C
Melt flow index	29 cm ³ /10 min	ISO 1183	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	39 MPa 32 MPa	ISO 527 ISO 527	at yield, 50 mm/min at break, 50 mm/min
Elongation at break	20 %	ISO 527	50 mm/min
Flexural strength	60 MPa	ISO 178	2 mm/min
Flexural modulus 1900 MPa	1900 MPa	ISO 178	2 mm/min
Izod impact strength	24 kJ/m ² 10 kJ/m ²	ISO 180-1A ISO 180-1A	23 °C, notched -30 °C, notched
Charpy impact strength	25 kJ/m ² 11 kJ/m ²	ISO 179 ISO 179	23 °C, notched -30 °C, notched

THERMAL PROPERTIES	TYPICAL VALUE	TEST METHOD	TEST METHOD
Heat distortion temperature	81 °C	ISO 75-A	1,8 MPa
Vicat softening temperature	103 °C 96 °C	ISO 306 ISO 306	50 °C/h, 1 kg 50 °C/h, 5 kg
Heat distortion temperature	9,0 × 10 ⁻⁵	ISO 11359	

PRINTING PROPERTIES	RECOMMENDED	NOTES
Print temperature	220-240 °C	Recommended settings!
Hot pad	80-105 °C	It may differ according to the printer and the object. Try your own optimization before printing.
Bed adhesive	3DIac, glue stick	Always use brim for better bed adhesion.