

Product card: ABS+ filament for 3D printing.

Product description: Filament ABS+ - thermoplastic product in the form of fiber, used for 3D printing using the FFF method. Filament wound on a spool, vacuum packed with a moisture absorber. The spool contains 1 kg of net material. It can be used in all FFF printers that are not protected from external suppliers and open source structures before using. ABS+ is easily machined such as grinding, drilling or smoothing, the material is soluble in acetone.

## Physical properties of the product:

Diameter of filament	1.75 mm / 2.85 mm
Dimensional tolerance of filament	+/- 0.05 mm
Roundness of filament	+/- 0.02 mm
Surface of the material	Gloss
Shrinkage of the material	Large
Product weight	1.0 kg net, 1.4 kg gross
Spool - material	Transparent policarbonate
Weight of the empty spool	~257 g
The diameter of the spool	200 mm
Width of spool	~70 mm
Diameter of mounting hole	52 mm
Packaging	Printed cardboard
Package size	~230x210x80 mm
Vacuum packing	Yes
Moisture absorber	Yes

## Suggested printing parameters:

Hotend	230-240°C
Heated bed	90-100°C
Cooling the printout	Not recommended

Due to the structural differences of printers, the above figures should be considered as guidelines and the corresponding values must be determined experimentally.







## Physical properties of the material:

Specific Gravity	1.04 g/cm3	ASTM D792
Vicat Softening Temperature	94°C	ASTM D1525
Flammability	НВ	UL 94
Rockwell Hardness (R-Scale)	105	ASTM D785
Tensile Strength - Yield	430 kg/cm2	ASTM D638
Tensile Elongation - Break	30%	ASTM D638

## Availability of colors and diameters:

Color	Kolor	1.75	2.85
Natural	Naturalny	<b>✓</b>	
White	Biały	<b>✓</b>	<b>/</b>
Bright Yellow	Jasnożółty	<b>✓</b>	<b>/</b>
Bright Orange	Jasnopomarańczowy	<b>✓</b>	
Orange	Pomarańczowy	<b>✓</b>	
Red	Czerwony	<b>✓</b>	<b>✓</b>
Gray	Szary	<b>✓</b>	
Blue	Błękitny	<b>✓</b>	
Super Blue	Niebieski	<b>✓</b>	<b>/</b>
Navy Blue	Granatowy	<b>✓</b>	
Bright Green	Jasnozielony	<b>✓</b>	<b>/</b>
Green	Zielony	<b>✓</b>	
Gold	Złoty	<b>✓</b>	
Aluminum	Aluminiowy	<b>✓</b>	
Black	Czarny	<b>/</b>	<b>/</b>