



Description

ABS PLUS (Acrylonitrile Butadiene Styrene) is a filament with high butadiene content, specially designed for applications that require ultra high impact toughness combined with good thermal resistance.

Typical properties

	Standard	Value	Unit
Specific gravity	ISO 1133	1.04	g/cc
Melt flow rate	/	/	cm ³ /10 min
Melting temp.	ISO 294	220-260	°C
Heat deflect. temp.	ISO 75	94	°C

Typical properties (3D printed)

	Standard	XY Value	XZ Value	ZX Value	Unit
Tensile Strength	ISO 527-2	32.1	31.7	15.4	MPa
Yield Strength	ISO 527-2	26.1	25.3	0.0	MPa
Tensile Modulus	ISO 527-2	1700	1600	1400	MPa
Strain at Yield	ISO 527-2	6.1	3.8	1.1	%
Flexural Strength	ISO 178	50.7	53.7	31.6	MPa
Flexural Modulus	ISO 178	1700	1800	1300	MPa
Impact Strength	ISO 179	/	/	/	kJ/m ²

All specimens were printed with 100% infill, 2 shells and a layer height of 0.2mm

Printing recommendations

	Standard	Value	Unit
Printing temp.	AF	230-260	°C
Bed temp.	AF	90-120	°C
Printing speed	AF	50-100	mm/s
Cooling	AF	30	%
Bed surface	/	PEI, BUILDTAK	/

