SMART3D Materials

ABS Pro · Technical Data Sheet

General Features

Chemical Name

Acrylonitrile Butadiene Styrene

Benefits

- · Zero warp technology
- Excellent interlayer adhesion
- Reliable bed adhesion (Glass, tape & other adhesives)
- Enhanced mechanical properties over regular ABS
- · Great strength & aesthetics

Filament Charcteristics

Diameter	Ø 1.75mm
Meters per spool	377.956m
Weight per meter	2.65g
Tolerance	±0.05mm

Material Properties

		Typical value	Test Method
Specific gravity	g/cc	1,1	ISO 1183
MFI 260°C/5 kg	g/10 min	41	ISO 1133
Tensile strength at yield	MPa	40	ISO 527
Tensile strength at break	MPa	25,5	ISO 527
Elongation strain at break	%	10	ISO 527
Elongation strain at yield	%	2,9	ISO 527
Tensile (E) modulus	MPa	1980	ISO 527
Impact strength - Charpy method 23°C (notched)	kJ/m2	58	ISO 179 1eA
Printing temp.	±10°C	245	Internal method
Melting temp.	±20°C	235	ISO 294
Vicat softening temp. B	°C	76	ISO 306 B50
Vicat softening temp. A	°C	97	ISO 306 A10

Additional info:

Recommended temperature for heated bed is ≥100°C. ABS-X is printed at high temperatures to make the final product extra strong. ABS-X can be used on all common desktop FDM or FFF technology 3D printers. Storage: Cool and dry (15-25°C). This enhances the shelf life significantly



www.mastertec3d.es

Disclaimer:

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WARNING: This Filament - when used in the operation of 3D Printers or 3D Pens - can expose you and others in the same room to styrene, a chemical known to the State of California to cause cancer. www.P65Warnings.ca.gov. ALWAYS OPERATE THIS PRODUCT IN A WELL-VENTILATED AREA.