

Technical Datasheet

INTAMSYS

INTAMSYS® ABS-HS

Product Description

INTAMSYS® ABS-HS is an Acrylonitrile-Butadiene-Styrene based filament designed specifically for FDM/FFF 3D printing. It offers higher printing speed, the melt index from 9g to 24g, so up to 250% higher flow rate compared to standard ABS. It also comes with superior printing quality, excellent mechanical strength and heat resistance, with moderate printing temperatures and great warping resistance.

PHYSICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL VALUE
Density	ISO 1183, Crystalline	g/cm ³	1.04
Glass transition temperature	ISO 11357	°C	96
Heat Deflection Temperature	ISO 75-f, 1.8 MPa	°C	85
Melt index	ASTM D1238, 220°C /10KG	cm ³ /10min	24

MECHANICAL PROPERTIES ¹	ORIENTATION	TEST METHOD	UNITS	TYPICAL VALUE
Tensile strength	XY	ISO 527	MPa	29.4
Young's modulus	XY	ISO 527	MPa	813.4
Elongation at break	XY	ISO 527	%	6.3
Flexural strength	XY	ISO 178	MPa	67.9
Flexural modulus	XY	ISO 178	MPa	1895.6
Impact strength	XY	ISO 179, Notched	kJ/m ²	4.5
Tensile strength	Z	ISO 527	MPa	19.7
Young's modulus	Z	ISO 527	MPa	789.2
Elongation at break	Z	ISO 527	%	2.98
Flexural strength	Z	ISO 178	MPa	42.4
Flexural modulus	Z	ISO 178	MPa	1203.2

Note:

All testing specimens were printed using a FUNMAT 3D PRINTER under laboratory conditions:
Flow=100%, and infill=100%, unannealed.

Disclaimer

The typical values presented in this document are intended for reference and comparison purposes only. They should not be used for design specifications or quality control purposes. Actual values may vary significantly with printing conditions. End-use performance of printed parts properties can be impacted by, but not limited to, part design, environmental conditions, printing conditions, etc. Product specifications are subject to change without notice.

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