

# INTAMSYS<sup>®</sup> ABS

INTAMSYS<sup>®</sup> ABS is a Acrylonitrile-Butadiene-Styrene based filament designed specifically for FDM/FFF 3D printing. It offers 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	g/cm <sup>3</sup>	1.10-1.15
Glass transition temperature	DSC, 10°C/min	°C	—
Softening temperature of filament	Custom method	°C	100-110
Melt index	220°C, 10kg	g/10min	9-14
Moisture content	Thermogravimetric	%	≤0.1%
Odor	-	-	Almost odorless
Solubility	-	-	Insoluble in water

MECHANICAL PROPERTIES <sup>1</sup>	TEST METHOD	UNITS	TYPICAL VALUE
Tensile strength	ISO 527	MPa	28.8
Young's modulus	ISO 527	MPa	1847
Elongation at break	ISO 527	%	3.8
Bending strength	ISO 178	MPa	65.5
Bending modulus	ISO 178	MPa	1530
Impact strength	ISO 179	kJ/m <sup>2</sup>	16.4

Note:

1. All testing specimens were printed using a FUNMAT HT under the following conditions: Printing temperature = 240 °C, printing speed = 45 mm/s, number of shells = 2, and 100% infill.

## 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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