

INTAMSYS® PC-PBT

Product Description

INTAMSYS® PC-PBT (polycarbonate/polybutylene terephthalate terpolymer blend) is a thermoplastic alloy, which is designed specifically for FDM/FFF 3D printing. It offers good heat resistance and toughness at low temperature (-20°C/-30°C), and also features good chemical resistance.

PHYSICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL VALUE
Density	ISO 1183	g/cm ³	1.2
Glass transition temperature	DSC, 10°C /min	°C	140
Melting temperature	DSC, 10°C /min	°C	223
Heat deflection temperature	ISO 75 1.8MPa	°C	91
Melt index	260°C, 5 kg	g/10min	16-22

MECHANICAL PROPERTIES ¹	TEST METHOD	UNITS	TYPICAL VALUE
Tensile strength	ISO 527	MPa	43.2
Young's modulus	ISO 527	MPa	2100
Elongation at break	ISO 527	%	6.9
Flexural strength	ISO 178	MPa	56.7
Flexural modulus	ISO 178	MPa	1938
Impact strength	ISO 179, Notched	kJ/m ²	26.9

Note:

- All testing specimens were printed using a FUNMAT HT 3D PRINTER under the following conditions:
Printing temperature = 270 °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.

Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/recycling practices of INTAMSYS materials for the intended application. INTAMSYS makes no warranty of any kind, unless announced separately, to the fitness for any particular use or application. INTAMSYS shall not be made liable for any damage, injury or loss induced from the use of INTAMSYS materials in any particular application.