

INTAMSYS® PLA

Product Description

INTAMSYS* **PLA** is 3D printing material, **PolyL**actic **A**cid, with excellent mechanical properties and printing quality. It has a higher impact resistance than regular PLA, and better overall mechanical properties than ABS.

PHYSICAL PROPERTIES	TEST METHOD	UNITS	TYPICAL VALUE
Density	ISO 1183	g/cm ³	1.17-1.24
Glass transition temperature	DSC, 10°C/min	°C	
Softening temperature of filament	Custom method	°C	146-150
Melt index	190°C, 2.16kg	g/10min	5-8

MECHANICAL PROPERTIES ¹	TEST METHOD	UNITS	TYPICAL VALUE
Tensile strength	ISO 527	MPa	45.6
Young's modulus	ISO 527	MPa	2641
Elongation at break	ISO 527	%	2.4
Flexural strength	ISO 178	MPa	87.7
Flexural modulus	ISO 178	MPa	1900
Impact strength	ISO 179, Notched	kJ/m²	2.7

Note:

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 impact 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.

^{1.} All testing specimens were printed using a FUNMAT HT 3D PRINTER under the following conditions: $Printing \ temperature = 210\ ^{\circ}C, \ printing \ speed = 45\ mm/s, \ number \ of \ shells = 2, \ and \ 100\% \ infill.$