

SAKATA 3D PA-NT (Nylon) filament consists of an unfilled copolyamide, specially designed for 3D FDM/FFF printers. It shows a high transparency, low moisture absorption capacity, high hardness and excellent mechanical and chemical properties. It can be easily printed on open and/or closed printers. Made in Spain by POLIMERSIA GLOBAL S.L.

FILAMENT SPECIFICATIONS	Unit	Value
Diameter	mm	1.75 ± 0.03
Max. roundness deviation	mm	0.03
Net weight	g	850

PHYSICAL PROPERTIES	Standard	Unit	Value
Density	ISO 1183	g/cm ³	1.15
Haze	ASTM D1003	%	3
Moisture absorption	ISO 62	%	3
Water absorption	ISO 62	%	9.5
MECHANICAL PROPERTIES	Standard	Unit	Value (dry/cond.)*
Tensile modulus	ISO 527	MPa	2,900 / 1,500
Tensile strength	ISO 527	MPa	50 / 30
Elongation at break	ISO 527	%	1.9 / >20
Flexural modulus	ISO 178	MPa	2,800 / 1,300
Flexural strength	ISO 178	MPa	112 / 60
Charpy unnotched impact strength	ISO 179	KJ/m ²	139 / NB
Charpy notched impact strength	ISO 179	KJ/m ²	6.8 / 40
MECHANICAL PROPERTIES (3D Printer bar)	Standard	Unit	Value (dry/cond.)**
Flexural modulus	ISO 178	MPa	2,000 / 1,100
Flexural strength	ISO 178	MPa	100 / 40
THERMAL PROPERTIES	Standard	Unit	Value
HDT (0.45 MPa)	ISO 75	°C	60
HDT (1.8 MPa)	ISO 75	°C	60

NB: No break.

* dry = dry as moulded / cond.= conditioned according to ISO 1110

** dry = dry as printed / cond.= conditioned according to ISO 1110. 3D printed flexural bars in direction 45°, 4 mm thickness.

PRINT SETTINGS	Unit	Value
Nozzle temp.	°C	230 - 250
Type of nozzle	-	Brass
Bed temp.	°C	> 65
Type of bed	-	Glass or PEI
Fan speed	%	0
Layer height	mm	0.02
Print speed	mm/s	30 - 100
Dry specification	Before printing	> 8 hours at 70 °C (drybox)
	During printing	70 °C (drybox)

Certifications / Approvals

SAKATA 3D PA-NT filament is not certified for food contact either medical applications.

Safety Considerations

Good general ventilation of the workplace is recommended.

Disclaimer

The above information is provided in good faith. POLIMERSIA GLOBAL S.L. makes no warranty or representation of any kind, regarding the information given or the products described, and expressly disclaims all implied warranties, representations and conditions, including without limitation all warranties and conditions of quality, merchantability and suitability or fitness for a particular purpose.