

# Technical Data Sheet Ficha Técnica

SAKATA 3D PLA GO&PRINT is a bio-based and biodegradable filament for FDM / FFF 3D printers. This material (PLA) is very easy to print, making it an ideal choice for beginners and educational purposes. It shows an improved tensile and flexion strength and an excellent adhesion to the bed, high detail precision, low warping and low odour emission. High-speed printing up to 300 mm/s is also possible. Ideal for a wide range of applications, including prototyping, architecture projects, modelling, etc. 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	1,000

PHYSICAL PROPERTIES	Standard	Unit	Value
Specific gravity	ASTM D792	g/cm3	1.24
MECHANICAL PROPERTIES	Standard	Unit	Value
Tensile modulus (1)	ASTM D882	MPa	3,600
Tensile strength at break (1)	ASTM D882	MPa	53
Tensile yield strength (1)	ASTM D882	MPa	60
Elongation at break (1)	ASTM D882	%	6
Flexural modulus (1)	ASTM D790	MPa	3,800
Flexural strength (1)	ASTM D790	MPa	83
Charpy notched impact strength (1)	ASTM D256	J/m	16
THERMAL PROPERTIES	Standard	Unit	Value
HDT (0.45 MPa) (1)	ASTM E2092	ōС	55

<sup>(1)</sup> Injection moulding bars.

PRINT SETTINGS (1)	Unit	Value
Nozzle temp.	ōС	Classic: 185 - 200
		High speed: 200 - 240
Type of nozzle	-	Brass
Bed temp.	ōС	> 45
Type of bed	-	Glass or PEI
Bed treatment	-	Adhesive spray or stick when needed
Closure chamber	-	Not needed
Cooling fan	%	100
Layer height	mm	0.1 – 0.3
Print speed	mm/s	Classic: 50 - 100
		High-speed: 100 – 380 <sup>(2)</sup>
Max. volumetric speed	mm³/s	31 <sup>(2)</sup>
Dry specification	Before printing	4 – 6 hours at 55 <sup>o</sup> C (optional)
	During printing	55 ºC (optional)

 $<sup>^{\</sup>mbox{\scriptsize (1)}}$  Settings are based on a 0.4 mm nozzle.

#### **Certifications / Approvals**

SAKATA 3D PLA GO&PRINT filament is not certified for food contact either medical applications.

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<sup>(2)</sup> Nozzle temperature: 240 ºC.



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### **Safety Considerations**

Good general ventilation of the workplace is recommended.

#### Disclaimer

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