



SAKATA 3D PLA HIGH SPEED PRO is a biodegradable high-speed filament developed for today's highspeed printers, while maintaining premium performance. Optimised for printing speeds of up to 500 mm/s and maximum volumetric speed of 24 mm<sup>3</sup>/s without compromising strength or quality. This material ensures an excellent smooth printing, adhesion to bed, layer bonding, efficiency and precision, and minimal warping. Ideal for quick prototyping and high-volume production. 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
Density	ASTM D1505	g/cm <sup>3</sup>	1.24
MECHANICAL PROPERTIES	Standard	Unit	Value
Tensile modulus <sup>(1)</sup>	ASTM D638	MPa	3,365
Tensile strength <sup>(1)</sup>	ASTM D638	MPa	64
Flexural modulus <sup>(1)</sup>	ASTM D790	MPa	3,633
Flexural strength <sup>(1)</sup>	ASTM D790	MPa	112
THERMAL PROPERTIES	Standard	Unit	Value
HDT (0.45 MPa) <sup>(1)</sup>	ASTM E2092	°C	55

<sup>(1)</sup> Typical properties measured on injection moulded bars; not to be construed as specifications or properties of 3D printed part.

PRINT SETTINGS <sup>(1)</sup>	Unit	Value
Nozzle temp.	°C	Classic: 190 - 210 High speed: 210 - 250
Type of nozzle	-	Brass
Bed temp.	°C	> 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 – 500 <sup>(2)</sup>
Max. volumetric speed	mm <sup>3</sup> /s	24 <sup>(2)</sup>
Dry specification	Before printing	6 - 8 hours at 45 °C (optional)
	During printing	45 °C (optional)

<sup>(1)</sup> Settings are based on a 0.4 mm nozzle.

<sup>(2)</sup> Nozzle temperature: 250 °C.

#### Certifications / Approvals

SAKATA 3D PLA HS PRO 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.