PLA HR-870

TECHNICAL DATA SHEET

SAKATA 3D PLA HR-870 filament is suitable for all consumer-grade 3D FDM/FFF printers. This filament delivers improved heat-resistance and high impact strength to 3D printed parts. SAKATA 3D HR-870 Filament achieves thermal and mechanical properties similar to ABS while offering an alternative to styrenic-based material. It provides excellent 3D printing characteristics such as precise detail, good adhesion to build plates, less warping and curling, and low odour. Made in Spain by POLIMERSIA GLOBAL S.L.

FILAMENT SPECIFICATIONS	Unit	Value
Diameter	mm	1.75 ± 0.05 / 2.85 ± 0.05
Max. roundness deviation	mm	0.05
Net weight	g	1,000

PHYSICAL PROPERTIES	Standard	Unit	Value
Specific gravity	ASTM D792	g/cm^3	1.22
MECHANICAL PROPERTIES [1]	**Standard**	**Unit**	**Value**
Tensile strength	ASTM D638	MPa	40
Tensile modulus	ASTM D638	MPa	2,865
Flexural strength	ASTM D790	MPa	73
Flexural modulus	ASTM D790	MPa	2,414
Notched Izod impact	ASTM D256	J/m	233
THERMAL PROPERTIES	**Standard**	**Unit**	**Value**
Heat distortion temperature	ASTM E2092	ºC	75-85

[1] All 3D printed parts printed at 100% infill and annealed at 110ºC/20 min.

PRINT SETTINGS	Unit	Value
Nozzle temp.	ºC	205-225
Bed temp.	ºC	Not needed (50-70 optional)
Bed modification	-	--
Fan speed	%	100
Layer height	mm	0.1-0.3
Shell thickness	mm	1.2
Print speed	mm/s	Up to 120 mm/s
Annealing temperature	ºC	110-120

Certifications / Approvals

SAKATA 3D PLA HR-870 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 SL 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.

POLIMERSIA GLOBAL S.L. Phone: +34 958 993 824 Email: info@sakata3d.com www.sakata3d.com
REV 01-05-24