SAKATA 3D PLA-M is a biodegradable PLA-based filament for matte finish applications. Suitable for all consumer-grade 3D FDM/FFF printers. Despite its rough surface, this material is considered abrasive, so a hardness steel nozzle is not required. Easy to print, reliable bed adhesion, non-glossy surface finish. 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/cm^3	1.32
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
Izod notched impact strength [(1)]	ASTM D256	J/m	16
THERMAL PROPERTIES	**Standard**	**Unit**	**Value**
HDT (0.45 MPa) [(1)]	ASTM E2092	ºC	55

[(1)] Injection moulding bars.

PRINT SETTINGS [(1)]	Unit	Value
Nozzle temp.	ºC	Classic: 190 - 200 High speed: 200 - 240
Type of nozzle	-	Brass
Bed temp.	ºC	> 45
Type of bed	-	Glass or PEI
Fan speed	%	100
Layer height	mm	0.1 – 0.3
Print speed	mm/s	Classic: 50 - 120 High-speed: 120 – 480 [(2)]
Max. volumetric speed	mm^3/s	33 [(2)]
Dry specification	Before printing	2 – 4 hours at 60 ºC (optional)
	During printing	60 ºC (optional)

[(1)] Settings are based on a 0.4 mm nozzle.

[(2)] Nozzle temperature: 240 ºC.

Certifications / Approvals

SAKATA 3D PLA-M filament is not certified for food contact either medical applications.

Safety Considerations

Good general ventilation of the workplace is recommended.

Disclaimer

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