PLA - INGEO 850

DATA SHEET

PREMIUM FILAMENT

Premium filament with high resolution, ease of modeling, printing and engraving, high rigidity and low shrinkage.

PHYSICAL PROPERTIES	AVERAGE VALUES	UNITS	STANDARDS
SPECIFIC GRAVITY	1,24	g/cm³	ASTM D792
MRF	7 - 9	g/10 min²	ASTM D1238
RELATIVE VISCOSITY	4,0	1.0 g/dL	ASTM D5225
MAXIMUM FUSION TEMPERATURE	165 - 190	ºC	ASTM D3418
GLASS TRANSITION TEMPERATURE	55 - 60	ºC	ASTM D3418

MECHANICAL PROPERTIES	AVERAGE VALUES	UNITS	STANDARDS
TENSILE STRENGTH	9.500 (65,5)	psi (MPa)	ASTM D882
ELONGATION BY TRACTION	4,2	%	ASTM D882
IZOD IMPACT WITH NOTCHES	0,75 (40)	ft-lb/in (J/m)	ASTM D256
FLEXIBLE FORCE	18.300 (126)	psi (MPa)	ASTM D790
BENDING MODULE	646.000 (4357)	pasi (MPa)	ASTM D790
HEAT DISTORTION TEMPERATURE, 66 psi (0,45 MPa)	144	ºC	ASTM E2092
CLARITY	Opaque (when it is crystalline)		

THERMAL PROPERTIES	AVERAGE VALUES	UNITS	STANDARDS
FUSION TEMPERATURE	210 (410)	ºC (ºF)	
FEED	45 (113)	ºC (ºF)	
FEED TEMPERATURE	190 (355)	ºC (ºF)	
COMPRESSION SECTION	200 (375)	ºC (ºF)	
MEASUREMENT SECTION	210 (390)	ºC (ºF)	
ADAPTER	210 (390)	ºC (ºF)	
MOLD	210 (390)	ºC (ºF)	
SCREW SPEED	20 - 150	rpm	
FILAMENT DIAMETER INSPECTION	+/- 3% max. deviation		

PRINTING PROPERTIES	AVERAGE VALUES	UNITS	STANDARDS
NOZZLE TEMPERATURE	190 - 230	ºC	
HOT BED TEMPERATURE	Not necessary (50 - 70)	ºC	

SPOOL SIZE	DIAMETER	ON REQUEST	COLOR	PACKAGING
300g	1,75mm			Cardboard box, vacuum and silica
1Kg	1,75 - 2,85 mm			Cardboard box, vacuum and silica
3Kg	1,75 - 2,85 mm	Yes		Cardboard box, vacuum and silica
5Kg	1,75 - 2,85 mm	Yes		Cardboard box, vacuum and silica
8Kg	1,75 - 2,85 mm	Yes		Cardboard box, vacuum and silica

* The indicated parameters are valid for correctly calibrated printers (PyD, mechanical and fuser).
* Supervised and tested manufacturing process (diameter, color and winding) to guarantee the quality of our product.