

TEHNNICAL DATA SHEET

PLA PREMIUM

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Product description:

PLA PREMIUM is a grade developed for manufacturing 3D printer monofilament. Engineered to deliver improved heat-resistance and high impact strength to 3D printed parts, this formulated grade achieves thermal and mechanical properties similar to ABS while offering an alternative to styrenic-based materials. Monofilaments made with PLA PREMIUM provide excellent 3D printing characteristics such as precise detail, good adhesion to build plates, less warping or curling, and low odor.

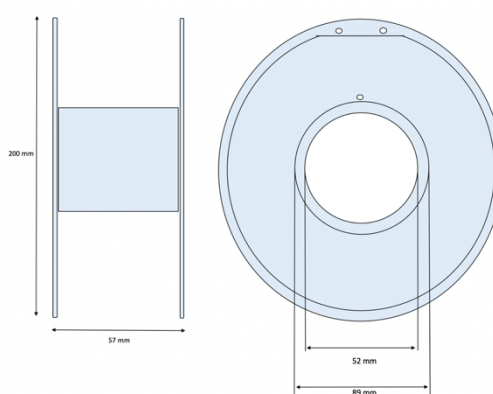
Storage:

Store in dry area, in a closed container away from moisture.

PRODUCT PARAMETERS

Parameter	Value
Filament diameter [mm]	1.75
Diameter tolerance [mm]	+/- 0,01
Oval tolerance [mm]	+/- 0,01

Spool dimensions [mm] (ø / height / hole ø)	200/57/52
Spool weight [g]	204
Spool material	Transparent SAN
Weight with packaging [g]	1 550
Net weight [g]	1 000
Box dimensions [mm]	203/207/70



RECOMMENDED PRINTING PARAMETERS

Parameter	Value
Print temperature [°C]	200-230
Bed temperature [°C]	None needed or 50-60 if applicable
Cooling [%]	100 recommended for better surface quality
Closed chamber	Not required, but may improve print
Chamber temperature [°C]	30-60
Printing Speed [mm/s]	60-300
Nozzle type	-

PHYSICAL PARAMETERS OF THE MATERIAL

Parameter	Value	Unit	Test method
Density	1.22	g/cc	D792
Melt flow rate	9-15	g/10min	D1238
Vicat softening temp.	75-85	°C	ISO 306 VST/A/50 (50°C/h,10N)
Tensile modulus	2 865	MPa	D882
Tensile strength	53	MPa	D882
Elongation at break	6	%	D882
Impact strength	16	J/m2	ISO 179 Charpy Notched @23°C (73°F)

The values above have been measured using standard test specimens made of non-colored material at room temperature. The figures should be considered as indicative values only. Actual properties of PLA PREMIUM parts can be affected by the printing parameters, design of the model, ambient conditions, application of the printout etc. It is essential that users test our products to determine whether they are suitable for their intended use.