

FLEXIBLE PLA+ (FPLA+) PRINT RECOMMENDATIONS

FPLA+ Technical details			
Printing Temp	190-220 °C	Tensile strength (X-Y)	8.8-9.3 Mpa
Bed Temp	0-40°C	Bending strength	30000lb/in2
Density (g/cm³)	1.21-1.30g/cm3	Elongation at break (X-Y)	500-600 (%)
Retraction distance	1mm	Melting Point	137°C
Retraction speed	20mm/s	Melt Volume Rate	6.38 (170°C, 2.16 kg)
Glass transition temp.	54 (°C)	Printing speed	40-80mm/S

Moisture absorption resistance of FPLA+ Filament

- Since Flexible PLA+ (FPLA+) comes from the PLA family and since it is soft, it will easily absorb moisture.
- To help the Customer maintain in dry stage, Ataraxia Art has provided each filament reel with its latest V2 Vacuum bag which can easily store two filament reels. We strongly recommend that the filament be kept in the vacuum bag immediately after its use and not be kept outside.
- If the humidity in the filament persists, it is recommended to dry the filament at 50 deg C for 2 to 3 hours and then use it for best results.

Use following parameters to prevent Stringing & Adhesion



Filament MUST be dry
(FPLA absorbs moisture very easily)

If bubbling dry the filaments for 2-3 hours at 50-60 C

Use a Nozzle of 0.6 mm

Nozzle temp 195 C

Layer of 0.35 mm- 0.4 mm

Only Printing shell, inside wall 0.8- 1 cm

Using a wall of 1 - 1.2 cm will result in a softer model.

Issue	Solution
The Filament is adhering a lot. This stuff adheres too well to textured PEI treated beds. The bottom layer is difficult to remove and stretches leaving a white colored texture on the print.	Ataraxia Art recommends using PVB globe in the plate or lower the print temperature to 180 to 190 deg C. U can also use a small layer of baby powder on the bed as well.
The FPLA is stringing and oozing.	We recommend for you to use a 0.6 mm nozzle and print at a nozzle temperature of 190° C with a bed temperature of 40° C.