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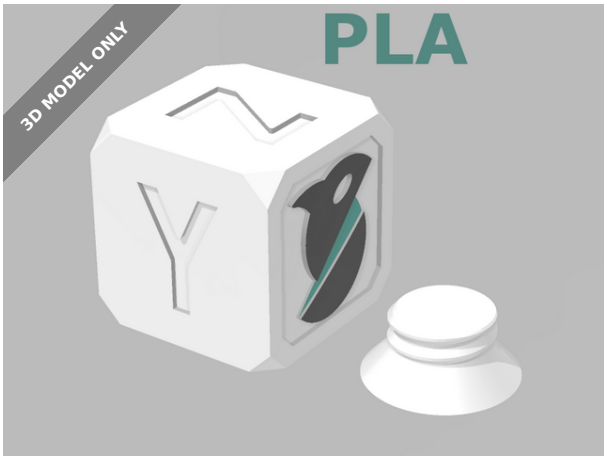

- PLA - Tuned X1C Print Profiles for Bambu/Orca-Slicer

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VIEW IN BROWSER

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Summary

People deserve a better starting point than generic profiles. I hope this PLA/PLA+ collection helps others!

3D Printers > Test Models

Tags: filament calibration tpu abs pla petg tuning profile asa tune bambulab x1c

Changelog:

- (7/18/23): Added **Prusament Marble Grey PLA**
- (5/20/23): updated / retuned **Prusament Galaxy Black PLA.** Improved PA value.
- (5/16/23): updated **Sunlu_White_PLA+** and **Sunlu_Grey_PLA+** with better PA values, min layer times, and retract settings than previous. If you downloaded them before, try the updated ones please!
- (4/28/23): Added **Inland Green Tough-PLA** (not the same as their other PLAs!). Noticed a mistake in the Overture Green PLA Pro profile with cooling times which has been fixed.
- (4/27/23): Added a profile for the very popular **Prusament Galaxy Black PLA,** which prints like magic butter.

- (4/20/23): Added a profile for **Polymaker White LW-PLA**, a pre-foamed lightweight PLA for stuff like planes
    - This is tricky to tune because it needs a rare extra-length-on-restart override+retraction override. Note that this is different from “foaming” PLA. Do not try to use this profile as a basis for other foaming PLAs, it will not work at all for those.

What this is:

This is a collection of all of my PLA/PLA+/Silk PLA filament profiles for all filaments I've used of this type. I will update it as I tune new filament brands and colors. They are generally tuned for **flow rate**, **pressure advance**, and **temperature** and **volumetric flow limits** and **overrides**. They're a good working starting point for anyone struggling with a filament. I've also tuned other types of filaments (see my models here), and you should find, by category:

- TPU / Flexibles
- Nylon/PA and PACF variants
- Polycarbonate & Polycarbonate-CF
- PETG
- ABS / ASA

CHT-Nozzle versions also available (0.4 mm , Brass)

- PETG
- PLA
- TPU
- ABS/ASA

How to use:

These 3MF files are designed for use in Orcaslicer/Bambuslicer, but will work best in Orcaslicer, because it supports using a fixed pressure-advance value in the slicer.

- Load the 3MF file for the filament of your choosing. Files are named as <**Brand>_<Color>_<Type>.3mf**.
- (optional, recommended): Save the filament and/or print presets for your own use to your user presets for future use.
- Remove the calibration cube dummy object and put your desired object in.

- **Print! But, turn off flow calibration option in your prints!** The more reliable PA value stored in the filament profile will be used instead, and you can skip the wasted startup time, too!
    - 

- If you want to use these in Bambu slicer, you won't get the PA values applied automatically sadly, and you'll have to do that with a manual GCODE in the filament's start GCODE. This is really annoying to do for each filament, but it does work. However I suggest you try Orcaslicer for this reason.

Important notes:

- These profiles are tuned on an X1C, with a hardened steel 0.4 nozzle installed, for use with a range of layer heights. **If you have a different nozzle size or nozzle kind (steel/brass), these will be only starting pointsand you should re-tune** most of the variables except maybe temperature.
- Each 3MF also contains some of my own optimized settings for 0.16 mm prints, which I typically use, but these tuned filament profiles are designed/tuned to work across a variety of different print profiles.

Background:

I use the Orca Slicer variant of Bambu's slicer because it offers finer-grained control over the slicing process and makes tuning and using tuned filament profiles much easier than Bambu's official slicer, which lacks good calibration routines for some of the most important variables in good printing: **flow rate**, **pressure advance**, and **temperature** and **volumetric flow limits.**

This is particularly true for Bambu's Pressure Advance (they incorrectly call this “flow”) calibration, which forces you to run it every time and is unreliable, particularly on the popular textured PEI surface.

Each of these profiles has been tuned for:

- **Flow rate** (aka extrusion multiplier)
- **Pressure advance** (aka linear advance)
- **Temperature** (with temp towers)
- **Volumetric flow limits** (my settings are a little conservative based on printing the max volumetric flow rate calibration inside Orcaslicer)
- **Overrides** (I typically try to avoid using these unless I have to)

Disclaimer: These are free to use, and I do not own the OrcaSlicer calibration cube model, i'm just using it here as a convenient way to distribute the profiles.

This remix is based on

- PETG - Tuned X1C Print Profiles for Bambu/Orca-Slicer

by Adam L

Model files

inland_white_pla.3mf

generic_gold_silkpla.3mf

overture_copper_silkpla.3mf

flashforge_galaxyblack_pla.3mf

overture_blue_plapro.3mf

prusament_gentlemensgrey_pla.3mf

prusament_green_pla.3mf

polymaker_white_lw-pla.3mf

inland_green_toughpla.3mf

overture_green_plapro.3mf

sunlu_grey_pla.3mf

sunlu_white_pla.3mf

prusament_galaxyblack_pla_retuned.3mf

prusament_marblegrey_pla.3mf

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