

- ABS/ASA - Tuned X1C Print Profiles for Bambu/Orca-Slicer



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Summary

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

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[bambulab](#) [bambulabx1carbon](#) [x1c](#) [x1carbon](#) [pacf](#)

Changelog:

- Added Polymaker Polylite ASA (4/20/23)
- Fixed the Polymaker ASA profile (4/21/23). I had uploaded the wrong one! Correct one is now uploaded as Polymaker_Grey_ASA_fixed.3mf
- (4/30/23): Fixed the ASA profile to have the filament type set to "ASA" instead of "ABS". Same exact settings otherwise as the profile from 4/21/23. New file replaces previous versions:
Polymaker_Grey_PolyliteASA.3mf
- (5/6/23): Added **Prusament_GalaxyBlack_ASA.3mf**
- (5/17/23): Improved **Prusament_GalaxyBlack_ASA.3mf** settings. If you downloaded before this date, please re-download for better PA and retraction values.

- (5/23/23): Improved **Prusament_GalaxyBlack_ASA.3mf** settings, again after dealing with frustrating under-extrusion issues impacting part strength. Sadly I can't get the volumetric above 11 for this one. Updated preset to my best settings.
- (6/6/23): Added **Prusament_SapphireBlue_ASA.3mf**. Volumetric = 19 unlike the troublesome Galaxy black ASA.
- (6/14/23): Added **Prusament_SignalWhite_ASA.3mf**, also revised the Sapphire Blue again. Note: VFR=19 on both still, but this appears aggressive for this filament and you may need to slow down the VFR to ~14 if you experience any under-extrusion issues. Annoyingly hard to tune PA for this ASA... there's no "ideal value" with either autocal or manual calibration, but 0.02 appears best.
- (8/9/23): I decided not to shrink-compensate my profiles because I think it's likely to introduce confusion for people who are used to scaling for these filaments, but for people who want to combat the common shrinkage in ABS/ASA, please [see my other model here that helps you calibrate](#).

What this is:

This is a collection of all of my ABS/ASA filament profiles for all filaments I've used of this type. I will update it as I tune new filament brands and colors. Right now for ABS this is polymaker-only, but I plan to try more brands. 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](#)
- [PLA / PLA + / Silk PLA](#)
- [PETG](#)

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 points and 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

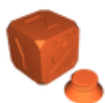
Model files



polymaker_blue_abs.3mf



polymaker_white_abs.3mf



polymaker_grey_polyliteasa.3mf



prusament_galaxyblack_asa.3mf



prusament_sapphireblue_asa.3mf



prusament_signalwhite_asa.3mf

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