

## **General Printing Tips:**

- Always print in a well ventilated area with good airflow and minimal temperature fluctuations.
- Be sure your build plate is level, clean and oil-free before printing.
- If prints appear stringy, lower temp in 5°C increments until your prints appear satisfactory or adjust your retraction settings.
- If you notice your feed motor clicking or not feeding, you may need to raise your print temperature in 5°C increments.
- For more consistent prints, consider experimenting with infills of 10-35% as well as print speeds and layer heights.
- Purge nozzle when changing to or from a different filament material.
- If your machine has a fan, we recommend using it.
- For optimal performance, always refer to the printer manufacturer's suggested settings, specific to your machine.

## **APLA Specific Printing Tips:**

- APLA filament will run best at an extrusion temperature of 195-215°C (2.85mm filament usually prints at the higher end of this range).
- For prints with overhangs, it is recommended to turn on rafts and supports in your settings.
- For good first layer adhesion, we recommend a water-based hairspray, lightly sprayed on the surface, right before starting your print.

## **DURA Specific Printing Tips:**

- DURA filament will run best at an extrusion temperature of 175-195°C (2.85mm filament usually prints at the higher end of this range).
- DURA™ filament adheres well to glass or plastic and does not require a heated build plate or heated chamber like ABS filament, however we do recommend a heated build plate and heated chamber if available.
  - If your machine does have a heated build plate, we do advise using it set at a temperature of 55-65°C.
  - o If your machine has a heated chamber, we advise running the ambient temperature between 45-55°C.
- It is recommended to use a water based glue stick before starting prints to ensure the first layer of the print sticks to the plate.
- We recommend trying lower print speeds for DURA than you would typically use for PLA filament.
- To improve cooling and print quality, we recommend turning on your printer fan or provide an
  external source for airflow.

## **ALGA Specific Printing Tips:**

- ALGA filament will run best at an extrusion temperature of 195-210°C (2.85mm filament usually prints at the higher end of this range).
- If you are experiencing stringiness, try increasing travel speeds or slightly decreasing retraction distance and speeds.
- For prints with overhangs, it is recommended to turn on rafts and supports in your settings.
- For good first layer adhesion, we recommend a water-based hairspray, lightly sprayed on the surface, right before starting your print.