

# Ultimate ABS and ASA 3D Printing Cheat Sheet





Unique Prints presents the ultimate cheat sheet for 3D printing with two popular filaments: ABS and ASA. This guide includes recommended settings, troubleshooting tips, and advice to help you achieve optimal results with your 3D printing projects.

### **ABS Filament**

- Nozzle Temperature: 230-260°C
- Bed Temperature: 80-110°C
- Print Speed: 40-60mm/s

### **ASA Filament**

- Nozzle Temperature: 240-260°C
- Bed Temperature: 80-110°C
- Print Speed: 40-60mm/s

## Troubleshooting Tips

### 1. **Warping and delamination:**

- Ensure proper bed adhesion (use gluestick, hairspray, or ABS juice)
- Use an enclosure to maintain consistent temperature
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### 2. **Nozzle clogs and jams:**

- Clean the nozzle regularly
- Check for moisture absorption in the filament
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### 3. **Weak layer adhesion:**

- Increase nozzle temperature or slow down print speed

By following these recommended settings and troubleshooting tips, you can achieve optimal results when 3D printing with ABS and ASA filament. Unique Prints is committed to providing quality filament that meets the demands of your project.

## **UV Stability**

ABS is also easy to work with and has a relatively low melting point, which means that it can be extruded at lower temperatures than other materials like PETG or Nylon. This makes it a great choice for users who are just starting out with 3D printing or who are working with entry-level or budget-friendly 3D printers. In most cases the only requirement being some kind of enclosure in order to raise the ambient temperature surrounding the part to minimize and prevent warping. Even a cardboard box over your machine will do.

## **Versatility**

While a heated bed is preferred, ABS can be printed without a heated bed, making it also adaptable to different 3d printing setups. A heated bed will help to prevent warping and other issues that can occur when printing with ABS. Depending on your setup and how well enclosed or how high the ambient temperature surrounding the part is – using some fan to cool the filament while it's being extruded, can help to improve the quality of the final print. It's also important to keep in mind that ABS is not ideal for every application. For example, ABS is not as heat-resistant as materials like polycarbonate, so it may not be the best choice for applications that require very high-temperature resistance. Additionally, ABS is not as flexible as materials like TPU or TPE, so it may not be the best choice for applications that require a lot of flexibility.



### **Our ABS Filament**

Overall, ABS filament is a great choice for many 3D printing applications due to its strength, durability, and low cost. Its versatility and easy printing characteristics make it a great choice for beginners and professionals alike. Its strength-to-weight ratio, impact resistance and wide availability makes it ideal for a range of industries, for example for automotive, consumer products, toys and electrical components, and of course 3D printer parts!