

Prusa SL1



- *LCD Shadow Masking DLP*
- *Build Volume:*
 - $400 \times 237 \times 225$
- *Layer Thickness:*
 - $0.01\text{mm} - 0.2\text{mm}$
- *Material:*
 - 405nm Resin

Safety

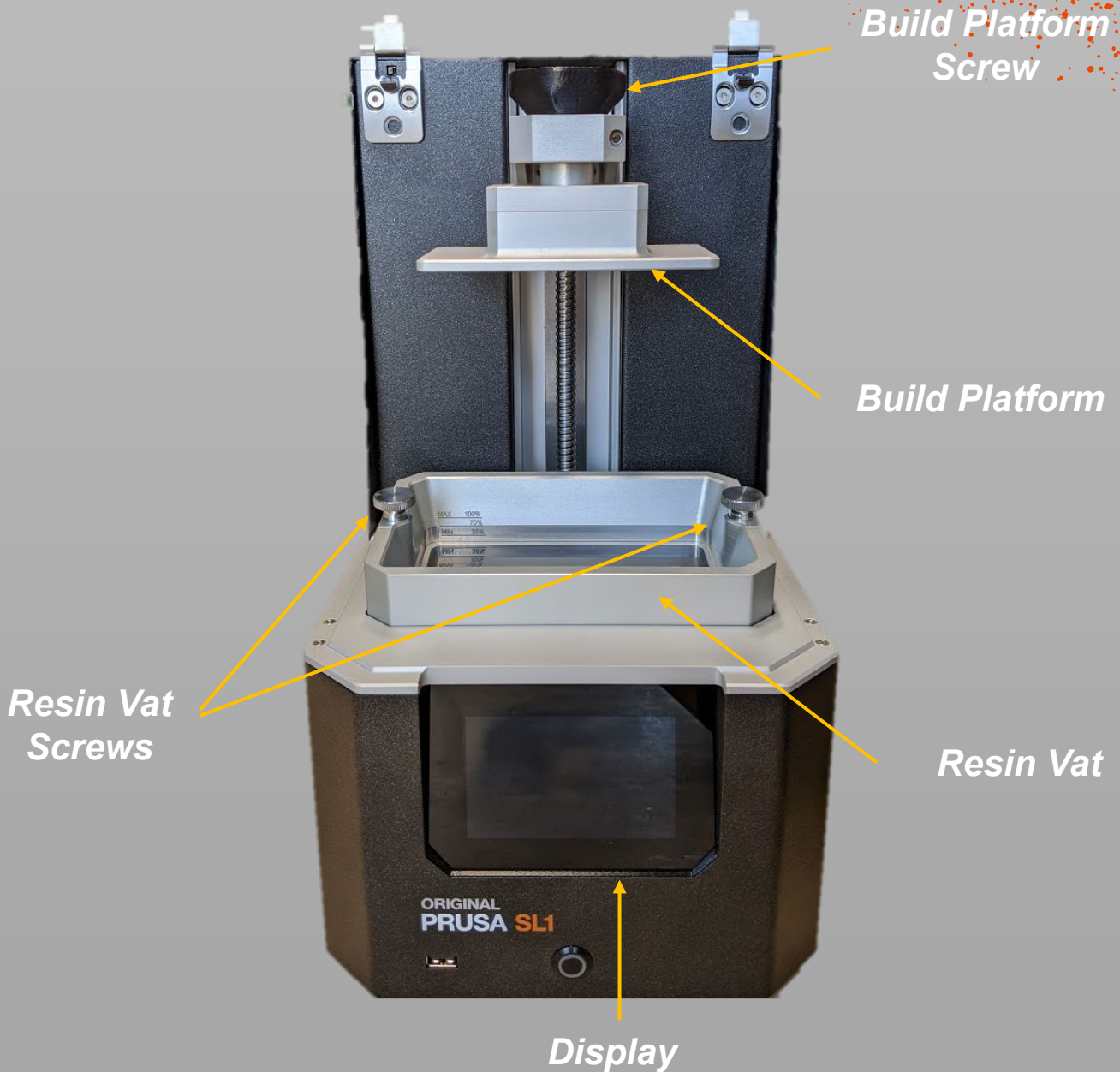
Wear mask, gloves and safety goggles when handling the resin.

Do NOT get your skin in contact with the resin



Steps to print & Machine Overview

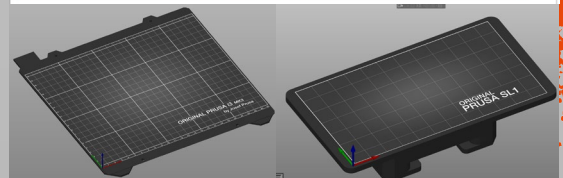
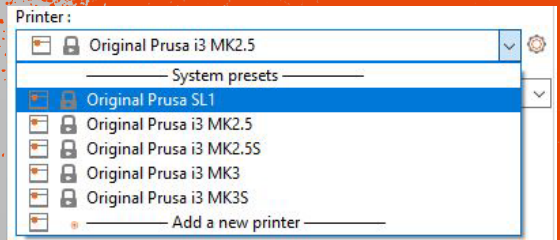
- *Slice your 3D-Model*
- *Prepare the Printer*
- *Print*
- *Post cure your print*
- *Clean the printer*



Step 1: Slice your 3D-Model

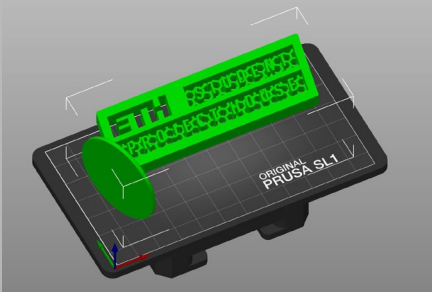
Open PrusaSlicer

Select the "Original Prusa SL1" in the machine dropdown on the right.



wrong

right



Drag and drop your .stl file onto the build plate.

Move

Use this to move your part around on the build plate.



Scale

This tool can be used to make a part bigger/smaller.



Rotate

With this tool you can rotate your part around the x, y and z axis.



Place on face

Select a face and the software will place it on the build plate.



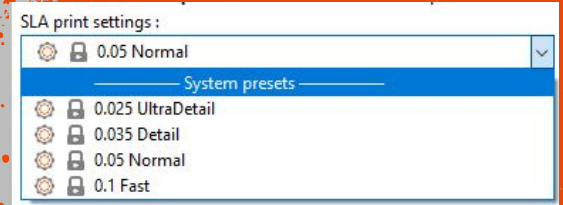
Cut

This tool lets you cut your part into two

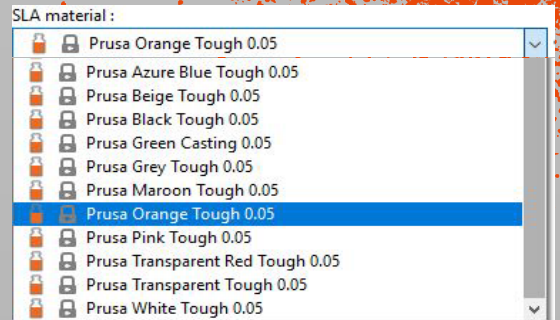


Step 1: Slice your 3D-Model

When you are happy with the orientation of your part it is time to select the Layer Height.



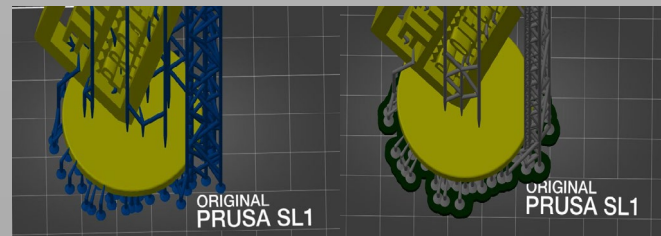
Then select the material according to the name on the bottle.



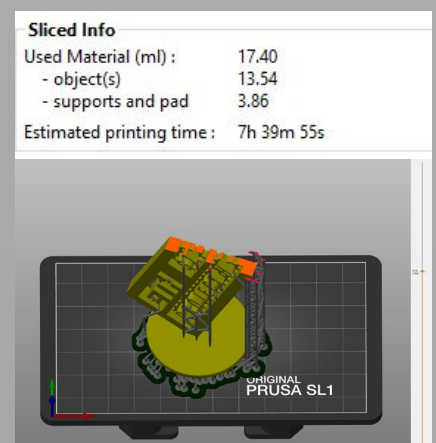
Afterwards it is time to select the support setting. Support everywhere is recommended.



The Use pad will add a pad underneath your print that will help with adhesion. It is recommended to use this.



After pressing **Slice now** the software will show you a preview. Please check the preview using the bar on the right to see that at no point a part of the model appears out of nowhere without support. If all is good use **Export**.



Step 3: Print

Log into the machine and use the button on the front to turn it on.



Select the print option and navigate to your part on the USB stick.



The machine will tell you some further information about your print.

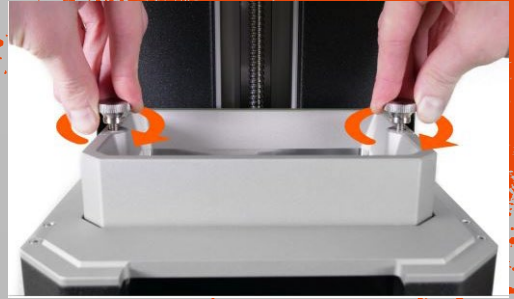


If you choose to print the part, the machine will tell you how much resin to add.



Step 3: Print

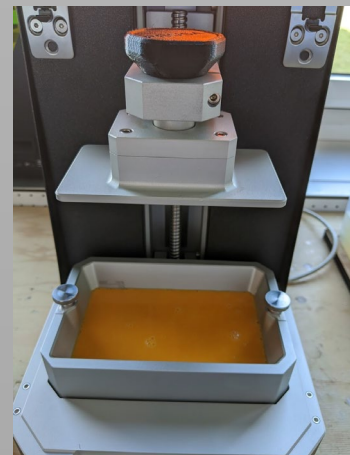
Place the resin vat in the machine. It should slip right into place. Tighten the two screws to fixate the tank.



Fill the resin in the vat. There are indications in the tank telling you how much you added.



After the vat is filled you can press the print button.



While printing the machine will tell you information about the status of your print.



Step 4: Postcuring

Prepare your workstation.

You need:

- *paper towels*
- *plastic scraper*
- *soft scraper*
- *alcohol*



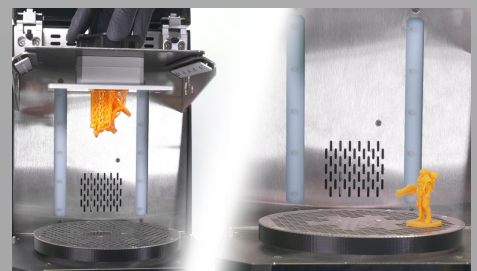
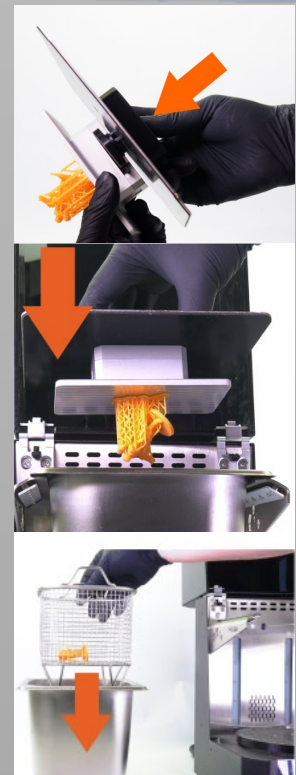
Loosen the build platform screw and remove the build platform from the printer.

Place it in the post curing station so that your print is covered by the isopropanol.

In case your part is too small, you can remove it from the build platform and place it in the basket.

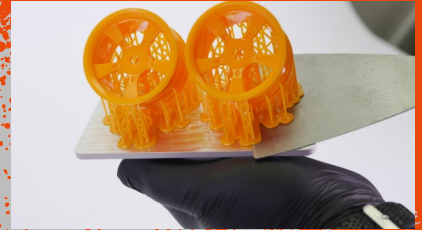
Use the clean option of the curing station to clean your part.

Afterwards remove the tank of isopropanol from the curing station and start the curing cycle.



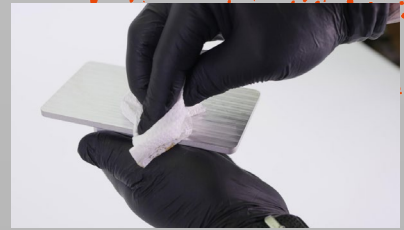
Step 4: Cleaning

After your print is cured you can remove it from the platform using the black plastic spatula.



NOTE: No cleaning is necessary if another print with the same color is started directly after your print.

Clean the build platform using alcohol and paper towels.



Put the filter-holder on top off the resin bottle. Insert a filter and fill the resin from the vat into the bottle through the filter.

Use the silicone scraper (blue) to fill back as much resin as possible.

Clean the tank using ONLY paper towels.

IMPORTANT: NEVER use alcohol on the build tank!



Put the build platform and the resin vat back into the printer.



Finally, clean the scrapers you used with alcohol and paper towels

Billing

AFTER the cleaning, BEFORE the hardening of your part, weight it and log out of the machine.

Enter the weight of the part. The amount will be subtracted from your Makerspace balance.

The price is 2 CHF for each print PLUS 0.15 CHF/g

IMPORTANT

Wear a MASK, GLOVES and SAFETY GOGGLES when HANDLING THE RESIN.

PREPARE your WORKSTATION BEFORE getting the part out of the printer.

When in DOUBT ask a MAKERSPACE MANAGER.

