

Form 2 3D Printer

ANU MakerSpace Safe Operating Procedure:

Low Risk Equipment - low risk of resin exposure.

PPE: Closed toe shoes, loose clothing and hair must be restrained. Gloves must be worn.

Pre-operational Checks

- Ask for assistance if unsure when using the Preform software for preparing your 3D models.
 Many issues begin with a poorly designed model or poor choice of printing parameters.
 Preform has a great wizard function to get you started.
- 2. In Preform, ensure that there are no red highlights on your model- this indicates areas where prints may fail.
- 3. Only use proprietary Formlabs Photopolymer resin.
- 4. Use gloves any time you are handling printer components or opening the printer cover. The resin is an easily transferred skin irritant.
- 5. Never touch the under side of the resin tank. Damage or marking this area will affect print quality.
- 6. Check that the print bed, resin tank and resin cartridge are correctly installed.
- 7. Check resin tank for debris by gently moving the wiper through the resin before each print. If there is coagulated resin please alert MakerSpace staff.
- 8. If you notice damage or leakage to the resin tank or flasks alert staff or a mentor.

Operational Checks

- 9. Do not manually move the printhead or print bed using your hands.
- 10. Do not place fingers or tools inside the printer while parts are building. Opening the tank will slowly cure the remaining resin in the tank.

Post-operational Checks

- 11. Wearing gloves, attach the finished print bed to the stand provided. Be cautious as drips into the printer can cause irreversible damage to the machine.
- 12. Only remove and handle prints on the black print tray in the fume cupboard. Cover this work area with bench roll.
- 13. Use only the supplied tools (found in the fume cupboard) to finish your parts. Using only these tools reduces resin exposure to other MakerSpace users.
- 14. Throughly clean the build plate and tools immediately with isopropyl alcohol. Dispose of dirty bench roll.
- 15. If you are using your own resin + tank CAREFULLY detach the wiper and resin tank, cover the tank, and place back in box. Otherwise replace the lid on the installed resin tank.
- 16. Discard any failed prints/support in the bins provided. Leave the print enclosure clean.

