

Creating 3D Printed Molds for Sylgard 184

Step 1:

3D print mold design on the Object 30 Pro printer in the microfluidics lab using RGD 450 filament and the glossy setting.

Step 2:

Remove molds from printer, clean print heads and clean away all support material.

Step 3:

Heat treat the parts at 60°C for 4 hours.

Step 4:

Remove parts from heater and let cool, then prepare Sylgard 184 mixture.

Step 5:

Pour Sylgard 184 mixture into molds and remove air bubbles using the vacuum degasser as required.

Step 6:

Place filled mold in heater and let cure at 60°C for 6 hours.

Step 7:

Remove cured mold from heater and remove part from mold

Reminders:

Do not use equipment that you are not competent with.

Molds should be designed to be liquid tight and have methods to separate the sides post-curing.