# Standard Operating Procedure: 3-D Printing (Extrusion/Photopolymer)

## Overview

This section provides a 3-4 sentence summary of the specific process and the potential hazards.

## Personal Protective Equipment (PPE)

1. Respiratory Protection:   
   This section should instruct them to only operate the printer inside its enclosure, to wear N95 masks if you recommend them, and include information on ventilation.
2. Gloves:  
   This section describes when gloves should be worn.
3. Eye Protection:  
   This section describes the potential hazards from UV or laser light and what protection to use.

## Standard Procedures

This section is your specific step-by-step procedure on using the equipment.

## Emergency Procedures

Whenever seeking treatment for an injury, follow the personnel exposure guidance in the attached Laboratory Injury Reporting guide. All injuries should be reported to the HPC director; work-related injuries (student or staff) must additionally be reported to TCCS Workers Compensation.

Cut or Puncture:  
Apply pressure to the wound to stop bleeding. Use a first aid kit to treat small injuries; call Campus Safety for first aid and transport for serious injuries.

Skin Exposure:If skin exposure to the resin or polymer results in irritation, rinse the affected area with water for 15 minutes.

Eye Exposure:In case of dust particles, resin, or polymer in the eyes, rinse the eyes using a saline solution eyewash bottle.

Inhalation: In case of respiratory irritation from dust particles, resin, or polymer, move to fresh air.

## Hazardous Waste Disposal

Empty containers of polymer solutions should be treated as hazardous waste and brought to a departmental hazardous waste collection area. Contact the EH&S Officer at (909) 607-7359 or [katherine.muller@pomona.edu](mailto:katherine.muller@pomona.edu) for waste pickup or for information about waste storage areas.

## Acknowledgment

This SOP has been reviewed and approved by:

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By signing below, you acknowledge that you have reviewed this SOP in its entirety, have completed in-person training with the Director of HTC, and will follow the rules and procedures of the 3D printing lab.

| **Name** | **Signature** | **Date** | **Supervisor Initial** |
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