

**EEM-EHSEHS**

**Environmental Health and Safety**

**The SOP Title Here**

**Standard Operating Procedure**

Your Name Here:

Date:

Revision Number:

Date of Revision:

Write a brief description of what this process is used for here.

1. **Material Requirements:**

**1.1 Equipment needed for process:**

List all of the equipment you need to successfully run this process. Be complete. If this is a new process that has not been done in the lab before, consult with lab staff to make sure that equipment you need is available.

**1.2 Chemicals needed for process:**

Include a complete list of the chemicals needed. If specific concentrations, purities, or grades are necessary cite them here.

 **1.2.1** **Hazards associated with chemicals:**

Include a subsection for each component chemical and if necessary a subsection for the chemical produced. Hazards will be found in the SDS. Look for information on whether the chemical is flammable, corrosive, toxic, carcinogenic, pyrophoric, an irritant, etc.

**1.3 Engineering controls:**

Where will you run this process? Options include fume hoods, vented ovens, furnaces, glove boxes, wet benches. If this is a new process and the appropriate engineering controls do not seem to be available in the lab, contact Kathi Lamond/EHS at 42746 to schedule a risk assessment. If no engineering controls are needed please cite this fact. Some of this information will be in the SDS.

**1.4 Administrative controls:**

Do not work alone in the lab.

Implement the buddy system.

Receive laboratory-specific training on the hazardous procedure.

Read the applicable safety data sheets and standard operating procedures before performing the hazardous procedure.

Are there specific times when this procedure must be conducted? For hazardous pieces of machinery, are there specific times when the machines can be used (i.e. 8:30 – 5 pm only)?

**1.5 Personal Protective Equipment (PPE):**

Minimum PPE required in a lab is safety glasses or safety goggles, lab coat and proper gloves. Please refer to a glove compatibility chart for proper type of gloves to wear. If hazardous chemical is not listed on the glove compatibility chart, call the manufacturer of the chemical to find out what is the best type of glove to wear.

**2.0 Procedure:**

Include detailed instructions on mixing the component chemicals. Information you should cite will include temperature settings, flow rates/pressure, concentrations, volumes and weights, appearance (if applicable), what the process is supposed to do, how to tell if the process was successful, and what to do with the hardware, chemicals, and equipment after the process is completed.**3.0 Storage:**

Where will you store this in the lab (e.g., solvent, acid, or base cabinet, refrigerator, etc.)? Be aware of incompatibility with other chemicals already in use in the lab. For example, one chemical might react violently with another. In this case you would want to avoid storage in a cabinet with this second chemical. Information will be found in the SDS.

**4.0 Disposal:**

Place the UMass Lowell Hazardous Waste Label on the container and fill out the label. Full and/or dated containers of hazardous waste are picked up by EHS during the weekly inspection checks for satellite accumulation areas or upon request by calling 42543. Remember, the container must be picked up within 3 days after the container is full or dated. Please call extension 42543 for a pick-up if your full and/or dated container of hazardous waste is generated.

**5.0 First Aid: (Found in the SDS)**

 For eyes

* Irrigate the eyes for 15 minutes, holding eyelids apart.
* Buddy must call extension 44911 to seek medical assistance and then can keep track of the length of time eyes are being irrigated.
* Give SDS for hazardous material to medical personnel when they arrive on scene.

 For skin

* For full body exposure, remove contaminated clothing and go under the emergency shower for 15 minutes. If bare hands and/or arms are contaminated, rinse area with water for 15 minutes. Remove clothing and rinse contaminated area for 15 minutes.
* Buddy must call extension 44911 immediately to seek medical assistance.
* Give SDS for hazardous material to medical personnel when they arrive on scene.

For inhalation

* Remove to fresh air. Seek medical attention immediately. (Call extension 44911).
* Give SDS for hazardous material to medical personnel when they arrive on scene.

 **6.0 Fire:**

* Evacuate the lab, pull the nearest fire alarm pull station and then go to a safe area and call extension 44911. Follow the fire safety evacuation plan.

 **Related Documents:**

**NOTE:** All work-related injuries must be reported immediately to Human Resources (HR) by calling extension 43560. An Incident/Injury Report Form must be filled out and faxed to EEM-EHS at 934-4018. [The Incident/Injury Report Form is available on-line at <http://www.uml.edu/ehs>. Please double click on the link at the end of this web page entitled [UMass Lowell Emergency Accident / Incident Report Form (PDF).]](http://www.uml.edu/ehs/Documents/UMass_Lowell_Emergency_Accident-%20Incident_%20Report_%20Form.pdf) The original Incident/Injury Report Form must be turned in to HR.

 *\*The buddy, supervisor, or Principal Investigator may fill out the Incident/Injury Report Form while the injured employee follows first aid procedures and seeks medical attention.*