

**EHS**

**Environmental Health and Safety**

**Handling Solvents**

**Standard Operating Procedure**

Name:

Date:

Revision Number:

Date of Revision:

**\*Attach description of process that involves the use of solvents. \***

**1.0 Hazards Associated with Solvents:**

List name of each solvent and hazards of each solvent here.

**2.0 Controls:**

**2.1 Engineering Control:**

* Utilize a fume hood.

**2.2 Administrative Controls:**

* Do not work alone in the lab. Implement the buddy system.
* Receive online lab safety training which is required annually. Go to this link - <https://www.uml.edu/EEM/EHS/Lab-Safety/> and scroll down until you see the information on the 4 training modules for the online lab safety training. Follow the steps listed for taking all of the modules.
* Know the location of the emergency shower and eyewash station.
* Receive lab-specific training and document this training in section 8 of your lab’s Chemical Hygiene Plan (CHP) Notebook.
* Review this SOP and applicable safety data sheets as part of your laboratory-specific training on handling specific solvents.
* Keep a hard copy of the safety data sheets in section 6 of the CHP Notebook.
* Place this SOP in section 7 of the CHP Notebook.
* Wash hands thoroughly with soap and water after removing gloves.

**2.3 Personal Protective Equipment:**

* Safety goggles are required if there is a splash hazard. Safety glasses are required at a minimum.
* Face shield required if there is a splash hazard to the face.
* Laboratory coat
* Fire resistant lab coat required for handling highly flammable solvents or large quantities of flammable solvents.
* See manufacturer’s glove compatibility chart or email [ehs@uml.edu](mailto:ehs@uml.edu) to verify correct type of glove is being worn.
* Closed toe shoes and pants

**3.0 Precautions:**

* Avoid contact with eyes and skin.
* Avoid inhalation of vapor or mist.

**4.0 Storage:**

* Store in a well-ventilated location.

**5.0 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 or emailing hazardous\_receiving@uml.edu.

**6.0 Emergency Procedures:**

**6.1 Spills**

**For spills that occur inside of a fume hood (< 100 milliliters)**

* If lab group has received proper training and a proper spill kit is available, the spill may be cleaned up by the lab group if the spill occurs inside of a fume hood.
* If the lab group has not received proper training and a spill kit is not available, please evacuate the lab and call 44911.

**For spills that occur outside of a fume hood**

* Evacuate the lab, post a restriction on the lab door and call UMass Lowell Police at extension 44911.
* Stay close by to answer questions when EHS and emergency response personnel arrive.

**6.2 First Aid**

For eyes

* Irrigate the eyes for 15 minutes, holding eyelids apart.
* Call extension 44911 or 978-934-4911 from a cell phone to seek medical assistance and then can keep track of the length of time eyes are being irrigated.

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 soap and water for 15 minutes.
* Call extension 44911 or 978-934-4911 from your cell phone immediately to seek medical assistance.

For inhalation

* Remove to fresh air. Seek medical attention immediately. Call extension 44911 or 978-934-4911 from a cell phone.

**6.3 Fire:**

* Evacuate the lab, pull the nearest fire alarm pull station and then go to a safe area and call extension 44911 or 978-934-4911 from a cell phone. Follow the fire safety evacuation plan.

**NOTES:**

1. Fill out the incident/near miss form on the EHS website at [www.uml.edu/eem/ehs](http://www.uml.edu/eem/ehs). EHS will contact you to investigate the incident to see what safety controls were missing in order to prevent this incident from occurring again.
2. All work-related injuries must be reported immediately to Human Resources (HR) by calling extension 43560. (HR has some forms that will need to be filled out within 48 hours after the incident.) An Incident/Injury Report Form must be filled out and faxed to EEM-EHS at 978-934-4018. [The Incident/Injury Report Form is available on-line at <http://www.uml.edu/ehs>. Please double click on the link, under quick links, for permits and forms.]

*\*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.*