

**Standard Operating Procedure for Using Acrylamide  
in the PI Name Lab (Bldg#, Room#)**

Print a copy and keep with your lab’s training documents.

|  |  |
| --- | --- |
| Department |  |
| Principal Investigator (PI) |  |
| PI Phone Number |  |
| Lab Manager |  |
| Lab Manager Phone Number |  |
| Emergency Contact |  |
| Emergency Contact Phone Number |  |

1. **Purpose**

The purpose of this document is to provide the information necessary to safely use **acrylamide** in the PI Name Laboratory and to comply with the requirements of OSHA Standard 29 CFR 1910 Subpart Z ([CAS #](https://www.osha.gov/chemicaldata/chemResult.html?recNo=331)79-06-1).

1. **Hazards of Acrylamide  
    **

***Toxic & Health Hazard* – Very Toxic; lethal oral dose for 150 lb. person is about 1 teaspoon or 1 ounce.** May cause cancer and genetic defects. Reproductive toxin. Prolonged repeated exposure (ingestion) causes nervous system damage. Neurological effects may be delayed. Individuals with nervous system diseases should not be exposed to acrylamide.

1. **Incompatible With:**
   * Azo- and diazo- compounds
   * Oxidizing and reducing agents
   * Acids and bases
   * Peroxides
   * Metals
2. **Training Requirements**

All UNM personnel who use acrylamide must be trained on the hazards, and how to protect themselves from the hazards, before using it. Trainings must include:

* This SOP (read and sign)

1. **Engineering & Administrative Controls**

Acrylamide must *only* be used within a properly functioning chemical fume hood that has a current annual certification. (Engineering Control).

All lab personnel who use acrylamide must be trained on the hazards, including being familiar with this SOP (Administrative Control).

1. **Required Personal Protective Equipment (PPE)**

* *Hand Protection*: At a minimum, complete protection of the skin is essential. Nitrile or other chemical-protective gloves must be worn when handling acrylamide.
* *Eye Protection*: Safety glasses or splash goggles must be worn when mixing or handling solutions acrylamide. A face shield is recommended if there is a potential for splashing.
* *Skin and Body Protection*: A lab coat must be worn when handling acrylamide.
* *Respiratory Protection*: Always open, pour, mix, handle, and use acrylamide within a properly functioning fume hood. Additional respiratory protection is not required.

1. **Standard Operating Procedures for Handling Acrylamide in the PI Name Here Lab:**
2. Put on proper PPE (eye protection, gloves, lab coat).
3. Remove acrylamide container from storage and place in the fume hood.
4. Continue listing the steps of the procedure in which acrylamide is used in this lab (i.e. how to weigh material, quantity used, etc.).
5. Place the container back in its storage location.
6. After removing gloves, wash hands thoroughly.
7. **Spill Procedures**

For small/minor spills (<1L) and spills inside of a fume hood – use the materials in your lab’s spill kit to clean up a spill of acrylamide. Minimum PPE is safety glasses/goggles, gloves and lab coat. The used spill clean-up materials must be double-bagged, tightly closed, labeled and picked up by EHS for disposal.

Large spills or spills outside of a fume hood should not be cleaned up by lab personnel. In the event of a large/major spill of acrylamide, evacuate the area and call:

* UNM Police -- 911 or 505-277-2241, and
* Environmental Health & Safety (EHS) – 505-277-2753 during business hours, or
* EHS Duty Officer Pager (after hours) -- 505-951-0194 (enter your phone number after the message)

1. **First Aid Procedures**

In the event of an acrylamide exposure:

* Skin or eye contact - wash immediately in safety shower or eyewash for 15 minutes, then seek medical attention.
* If the exposure is severe, seek medical attention at the emergency room.
  + If heading to UNMH, a non-injured person should contact the UNMH Charge Nurse in advance at 505-604-9349 and inform them of the situation.
* UNM employees should contact Employee Occupational Health Services (EOHS) at 505-272-8034.
* UNM students should contact Student Health Services at 505-277-7810.
* If the exposure occurs after hours, employees and students should seek medical treatment at an emergency room.
* The supervisor of the injured person and EHS must be notified as soon as possible after the exposure.
* A notice of Accident, Incident, or Spill form should be filled out on the EHS website (https://ehs.unm.edu/accident-incident-spill-reporting/index.html)

1. **Disposal Procedures**

Waste that contains acrylamide should be collected in a suitable container and properly labeled as soon as waste is added to the container. Acrylamide-containing waste should be labeled as such:

**HAZARDOUS WASTE**

**Acrylamide (include quantity or concentration)**

**Toxic, Corrosive & Reactive**

Call EHS at 505-277-2753 to request a pickup of acrylamide waste and/or other chemical wastes.

1. **Other Emergencies**

* **Fire or Medical Emergency -- 911 or 505-277-2241 (UNM Police)**
* **Life-Threatening Emergency, After Hours, Weekends and Holidays** – **911**
  + **EHS After Hours Duty Officer Pager – 505-951-0194** (enter return phone # after the outgoing message)
* **Non-Life-Threatening Emergency** – Call EHS at 505-277-2753 for assistance and/or to report the incident.

**Principal Investigator SOP Approval**

By signing and dating here, the Principal Investigator (PI Name) certifies that this SOP is accurate and provides information sufficient to safely use Acrylamide in the PI Name Laboratory (Bldg#, Room#).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature Printed Name/Title Date

I have read and understand the content of this SOP:

|  |  |  |
| --- | --- | --- |
| **Name** | **Signature** | **Date** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |