**Standard Operating Procedure (SOP)**

**for Highly Hazardous Chemicals**

**SOP Title:**

List the Chemical(s) used in the Procedure:

Principal Investigator(s) (PI)/ Supervisor:

PI/ Supervisor(s) e-mail:      @uwm.edu

If there is an Institutional Animal Care and Use Committee (IACUC) Protocol associated with this SOP for Hazardous Chemical use, return completed form to the Animal Care program (acp@uwm.edu) for approval.

Information on Highly Hazardous Chemicals and Chemical Purchasing Procedures are located on our website: [University Safety and Assurances Chemical Purchasing Procedure](https://uwm.edu/safety-health/chemical-purchasing-process/).

1. **Hazard Information Confirmation**:

A copy of all highly hazardous chemical Safety Data Sheet(s) (SDS) from the product manufacturers must be attached and submitted with this form. The SDS will provide the Chemical Concentration (as purchased) and Health and Physical Hazards needed.

[ ]  Confirm that the *Catalog number(s)* cited on the Safety Data Sheet (SDS) match the container information.

[ ]  Chemical was synthesized in the laboratory for research use only and a Safety Data Sheet (SDS) does not exist.

[ ]  Other hazards that are not indicated on a Safety Data Sheet (SDS)

Please Specify other hazards:

1. **Authorized Users:**

This information must be indicated unless stated in an alternative source such as IACUC Protocol submission – Check appropriate boxes.

[ ]  Information is submitted with IACUC Protocol.

[ ]  Alternate Source. Please specify:

Indicate who can use this substance per this SOP in your lab.

[ ]  Principal Investigator [ ]  Laboratory Manager

[ ]  Post Doc [ ]  Employees

[ ]  Graduate Students [ ] Technical Staff

[ ]  Undergraduate Student [ ]  Adult Volunteer

[ ]  Other

1. **Storage Information:**

[ ] Confirm that the material(s) is/are stored according to their Safety Data Sheet guidance and applicable regulations. (SDS Section 7)

Indicate all storage and use Locations for each chemical.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Chemical Name | Storage Location -Building | Storage Location -Room | Chemical Use Location – Building | Chemical Use Location - Room |
|  |  |  |  |  |
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|  |  |  |  |  |

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

The minimum personal protective equipment (PPE) to be used in the use and administration of chemicals are a **lab coat, nitrile gloves** and **safety glasses**.

[ ] Confirm that the minimum PPE (lab coat, nitrile gloves and safety glasses) will be worn during administration and use.

[ ]  Additional PPE required.

[ ]  Filtering Facepiece Respirator (a.k.a. Dust Mask) Please specify:

[ ]  Other Respiratory Protection. Please specify:

[ ]  Face Shield

[ ]  Goggles

[ ]  Shoe Covers

[ ]  Hearing Protection

[ ]  Alternative Glove Type: Please specify:

[ ]  Other PPE not listed: Please specify:

[ ]  Exemptions to the minimum PPE required. Please specify:

1. **Engineering Controls**

At a minimum, manipulation and administration of chemicals must take place in a fume hood

[ ]  Confirm that a fume hood will be used.

[ ]  Request Exemption: Please specify:

Indicate engineering controls to be used in addition to or in lieu of a fume hood:

[ ]  Biosafety Cabinet

[ ]  Snorkel/ Elephant Trunk

[ ]  Glove Box

[ ]  Vented Gas Cabinet

[ ]  Other (includes but is not limited to: pressure relief valves, intrinsically safe hot plates. Automatic shutoffs) Please specify:

1. **Risk Assessment to Justify a Safety Controls Exemption.**

If applicable, list each process step that eliminates hazards and explain the safety controls that would no longer be needed to ensure personnel safety for the remaining steps of the SOP. Be as specific as possible.

|  |  |  |
| --- | --- | --- |
| Process Step | Hazard eliminated | Safety Controlsexemption:  |
| *ex.) weighing nanoparticles and placing in suspension solution.*  | *The nanoparticles are no longer an inhalation hazard* | *Administering nanoparticle suspension solution on the lab bench not the fume hood.*  |
|       |       |       |
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1. **Chemical Spill Procedure**

Describe the spill cleanup procedure for the maximum volume of the chemical that would be in use at any one time. Refer to Section 6 of the SDS or seek guidance from University Safety and Assurances for procedures. <http://uwm.edu/safety-health/emergency/>

[ ]  An appropriate spill kit or cleanup materials are present in each lab where the chemical(s) is/are in use.

Note: some researchers will use the same highly hazardous chemical in multiple labs or areas in which they are working.

Explain spill procedure:

1. **Chemical Use Process / Procedure (**Use a paragraph or bullet points to provide a detailed description your process/procedure.

1. **Documentation of Training**

The individuals listed below have read and fully understand this Standard Operating Procedure. The individuals have received training from their Supervisor, Group Safety Representative (GSR) or Laboratory Manager/Graduate Student and are aware of all potential hazards and countermeasures related to this Standard Operating Procedure.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Name | Signature | E-Mail | Date | Trainer Initials |
| 1 |  |  | **@uwm.edu** |  |  |
| 2 |  |  | **@uwm.edu** |  |  |
| 3 |  |  | **@uwm.edu** |  |  |
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**Complete the following sections *only* if you have an accompanying IACUC Protocol associated with this SOP.**

**IACUC Protocol**

**Protocol Titles(s) and Protocol Number(s) for which this SOP is used.**

1. **Chemical and Carcass Disposal Requirement**

Refer to the Waste Disposal Guidelines <http://uwm.edu/environmental-protection/disposal-guide/> or contact Environmental Protection (hazwaste@uwm.edu) for guidance.

(Check all that apply)

1. **Chemical Disposal:**

[ ] Confirm routine scheduled hazardous waste pickup, No special requirements.

Check off requested chemical disposal exemptions below:

[ ]  Neutralization

[ ]  Sanitary sewer

[ ]  Other Disposal (Specify):

1. **Carcass:**

[ ]  Confirm Animal Facility freezer and disposal service.

Check off requested carcass disposal exemptions below:

[ ]  Scheduled Hazardous waste pickup

[ ]  Other disposal (Specify):

1. **Excretion-contaminated Materials (Hazardous):**

[ ]  Confirm that bedding from animals who have been treated with chemicals are **NOT** considered hazardous to personnel and ARC staff.

[ ]  Excretion materials **are** hazardous to personnel and ARC staff.

Check off below the tasks necessary to be performed by personnel and ARC staff if materials are hazardous.

[ ]  Disinfection is necessary (Specify):

[ ]  Autoclave

[ ]  Other Decontamination Methods. (Specify):

Explain Disposal Methods: (Specify):

1. **Safety Training for IACUC Protocol Holders**

[ ]  PI acknowledges all individuals using this SOP have received the appropriate safety training for this procedure including but not limited to Chemical Hygiene Plan and Hazardous Waste Generator training.

*Individuals listed in your IACUC procedure will be confirmed for minimal required safety training.*

1. **IACUC SOP Reviewed and Approved (initialed) by:**

|  |
| --- |
| **[ ]  Animal Care Program:****[ ]  Laboratory Safety:****[ ]  Environmental Protection:**  |