This is a recommended template for a chemical SOP. All work involving materials classified as Particularly Hazardous requires the completion of Section 6.

|  |  |
| --- | --- |
| Procedure Name  |  |
| Procedure Author |  |
| Name of Responsible Person |  |
| Location to be Performed |  |
| Creation Date |  | Review Date(s) |  | Revision Date(s) |  |
|  | **This standard operating procedure (SOP) is for a:**[ ] Specific laboratory procedure or experiment* Examples: synthesis of chemiluminescent esters

[ ] Generic laboratory procedure that covers several chemicals* Examples: distillation, chromatography

[x] Generic use of a specific chemical or class of chemicals with similar hazards* Examples: Organic azides, mineral acids, hydrofluoric acid

[ ]  Chemicals used in animals * **This form encompasses Part 1 of a two-part SOP requirement. Must accompany Chemicals in Animals SOP.**
 |
|  | **Description:** *Briefly describe how the chemical will be used.* Perfusions of animals using fixative solutions (e.x. paraformaldehyde, formalin) |
|  | **Risk Identification:** *Identify potential safety hazards*.  |
| [ ] Explosive[ ] Pyrophoric[ ] Flammable (liquid, solid, gas or aerosol)[ ] Self-Reactive[ ] Peroxide Forming[ ] Oxidizing (liquid, solid or gas)[ ] Organic Peroxides [ ] Water-Reactive[ ] Compressed Gases [ ] Cryogen[ ] Corrosion to Metals[ ] Radionuclides [ ] Other: Click or tap here to enter text. | [x] Carcinogen[ ] Sensitizer (respiratory and/or skin)[x] Irritant (skin and/or eye)[ ] Corrosive (skin and/or eye damage)[ ] Acute Toxicity (oral, dermal and/or inhalation)[x] Germ Cell Mutagen[ ] Reproductive Toxicity[ ] Target Organ Systemic Toxicity: Single Exposure[ ] Target Organ Systemic Toxicity: Repeated Exposure[x] Other: causes serious eye damage |
| Notes (include Permissible Exposure Limits): Click or tap here to enter text. |
|  | **What Engineering Controls will be used to minimize exposures to these hazards?**  *select all that apply*[x] Fume Hood[ ] Snorkel [ ] Glove Box [ ] Clean Room[ ] Explosion Shielding [ ] Splash Shielding [ ] Beta Shielding[ ] Safety Storage Cabinet [ ] Flammable Storage Refrigerator [x] Other: Downdraft perfusion table |
|  | **What Personal Protective Equipment is required to minimize these hazards?** *select all that apply*[x] Safety Glasses [x] Lab Coat[ ] Fire-Resistant Lab Coat[x] Gloves - specify type: Click or tap here to enter text.[ ] Acid Resistant Gloves[ ] Acid Resistant Apron[ ] Face shield [ ] Other: Click or tap here to enter text. |
|  | **Step-by-Step Operating Procedure (***Required for materials classified as Particularly Hazardous)**Provide a sequential description of work, including details such as chemical storage locations, identify the designated work area(s), chemical concentrations and amount used (mass, volume) and when special safety equipment is to be utilized. Include temperature, pressure, and other experimental conditions. Pictures and schematics are recommended for complex setups.* ***Highlight the steps with the highest hazards.***1. Step by step description of processes.
2. Step 2
 |
|  | **Transport, receiving and storage requirements** *Describe transport, receiving and storage requirements. Include secondary containment, transport devices (carts, carriers, etc.), segregation requirements, any special temperature or atmospheric requirements, and container compatibility requirements. Information may be included in Section 6.*Click or tap here to enter text. |
|  | **Waste disposal**Type of waste generated by this procedure/process (*check all that apply*): [ ] Solid [x] Liquid ☐Mixed (Bio and Radiation)Waste hazard determination (*check all that apply*):

|  |  |
| --- | --- |
| *Type of Waste* | *Hazard Determination* |
| Solid  | [ ] Flammable [ ] Oxidizer [ ] Corrossive [ ] Reactive [ ] Toxic |
| Liquid | [ ] Flammable [ ] Oxidizer [ ] Corrossive [ ] Reactive [ ] Toxic |

Disposal procedure and location of Satellite Accumulation Area: Do not pour paraformaldehyde waste into sinks or drains; Waste and unused solutions must be collected for proper disposal; and Waste solutions must be placed in tightly sealed, labeled containers and segregated for disposal via the EH&S Hazardous Waste Management.  |
|  | **Emergency procedures***Indicate how spills, personnel exposure/injury, and other accidents should be handled and by whom.* Click or tap here to enter text. |