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| **Lab-Specific Standard Operating Procedure Worksheet** | | | | | | | | | | | | | | | | |
| **Principal Investigator/Lab Manager:** | | | | | | | | | **Date:** | | | | | | | |
| **Lab Personnel Name(s):** | | | | | | | | | | | | | | | | |
| **Building**: | | | | | | | | | **Lab Number(s):** | | | | | | | |
| **Description of Experiment/Procedure/Process:** | | | | | | | | | | | | | | | | |
| **SECTION 1. TRAINING REQUIREMENTS** | | | | | | | | | | | | | | | | |
| **TRAINING DOCUMENTATION** | | | | | | | | | | | | | | **YES** | **NO** | |
| Have lab personnel completed Lab Safety and Chemical Waste Management training in the last year and all other required EHS trainings? Lab personnel can check their training history in [**HuskySMS**](https://ehs.uconn.edu/huskysms/).  **\*Lab personnel must complete required EHS trainings prior to work in labs with hazardous chemicals.** | | | | | | | | | | | | | |  |  | |
| **SECTION 2. PROCEDURE (Attach or insert the steps and safety controls in the procedure. Add more lines if necessary.)** | | | | | | | | | | | | | | | | |
| **Procedure Steps** | | | | | | | | | | | | | | **Safety Control** | | |
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| **SECTION 3. CHEMICAL HAZARDS (List the names, hazards, concentrations, and maximum amount of each chemical and the chemical products formed in the procedure. Add more lines, as necessary.)** | | | | | | | | | | | | | | | | |
| **Chemical Name** | | | | **Hazard(s)** | | | | | | **Concentration** | | | **Maximum Amount** | | | |
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| **Chemical Product Name** | | | | **Hazard(s)** | | | | | | | | | | | | |
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| **SECTION 4. ADDITIONAL HAZARDS (List additional hazards and safety controls involved in the procedure.)** | | | | | | | | | | | | | | | | |
| **Hazard Type** | | | | | **Description of Hazard and Control(s)** | | | | | | | | | | | |
| **Impact** | | | | |  | | | | | | | | | | | |
| **Cuts/Penetration** | | | | |  | | | | | | | | | | | |
| **Pressure** | | | | |  | | | | | | | | | | | |
| **Biological Agents** | | | | |  | | | | | | | | | | | |
| **Thermal (Hot/Cold)** | | | | |  | | | | | | | | | | | |
| **Electrical** | | | | |  | | | | | | | | | | | |
| **Harmful Dust/Mists/Fumes/Vapors** | | | | |  | | | | | | | | | | | |
| **Light (Optical) Radiation** | | | | |  | | | | | | | | | | | |
| **Ionizing Radiation** | | | | |  | | | | | | | | | | | |
| **Noise** | | | | |  | | | | | | | | | | | |
| **Other** | | | | |  | | | | | | | | | | | |
| **SECTION 5. ENGINEERING CONTROLS (List the engineering controls used to control the hazards)** | | | | | | | | | | | | | | | | |
| **Chemical Fume Hood**  **Biological Safety Cabinet**  **Glove Box** | | | | | | | | **Local exhaust (e.g., snorkels)**  **Blast Shield**  **Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | | | | | |
| **SECTION 6. WORK PRACTICES (List the work practices used to control the hazards)** | | | | | | | | | | | | | | | | |
| **Work Practices** | | | | | | | | | | | | | | **Yes** | | **No** |
| **Has the principal investigator/lab manager approved lab personnel to** [**work alone**](http://policy.uconn.edu/2012/07/30/working-alone-policy/)**?** | | | | | | | | | | | | | |  | |  |
| **Have lab personnel reviewed the safety data sheet (SDS) for each chemical being used?** | | | | | | | | | | | | | |  | |  |
| **Have lab personnel substituted or reduced the quantities of chemicals being used, if possible?** | | | | | | | | | | | | | |  | |  |
| **Have lab personnel performed a dry run of the procedure?** | | | | | | | | | | | | | |  | |  |
| **Have lab personnel learned the locations and proper usage of emergency equipment?** | | | | | | | | | | | | | |  | |  |
| **Describe additional work practices if required.** | | | | | | | | | | | | | | | | |
| **SECTION 7. PERSONAL PROTECTIVE EQUIPMENT (Select personal protective equipment required during the procedure.)** | | | | | | | | | | | | | | | | |
| **Body Part** | | | | | **Personal Protective Equipment** | | | | | | | | | | | |
| **Eye and Face Protection** | | | | | **Safety goggles**  **Safety glasses** | | | | | **Face shield**  **Other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | | | |
| **Head Protection** | | | | | **Hard hat** | | | | | **Other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | | | |
| **Hand Protection** | | | | | **Butyl rubber**  **Natural rubber**  **Neoprene**  **Nitrile**  **Polyvinyl alcohol (PVA)** | | | | | **Polyvinyl chloride (PVC)**  **Fluoroelastomer (Viton)**  **Norfoil**  **Thermally insulated gloves**  **Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | | | |
| **Body Protection** | | | | | **Lab coat**  **Flame-resistant lab coat**  **Long pants** | | | | | **Plastic or rubber apron**  **Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | | | |
| **Foot Protection** | | | | | **Closed-toed footwear**  **Steel-toed shoes**  **Other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | |  | | | | | | |
| **Respiratory Protection** | | | | | **Powered air-purifying respirator**  **Full face-piece negative pressure**  **Half-mask negative pressure** | | | | | **Dust mask**  **Not applicable**  **Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | | | |
| **Hearing Protection** | | | | | **Ear plugs**  **Earmuffs** | | | | | **Not applicable**  **Other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | | | | | |
| **Other** | | | | |  | | | | |  | | | | | | |
| **SECTION 8. EMERGENCY PROCEDURES** | | | | | | | | | | | | | | | | |
| 1. Relocate to a safe location. Close door(s) to lab. 2. Call **911**. 3. If safe, post a “NO ENTRY” sign(s) or other warning information on the door(s). 4. Evacuate the building through the nearest exit. Do not run. Do not use elevators. 5. Do not re-enter area until instructed to do so by UCFD or other emergency personnel. 6. Report the accident to principal investigator/lab manager. | | | | | | | | | | | | | | | | |
| **SECTION 9. FIRST AID PROCEDURES** | | | | | | | | | | | | | | | | |
| **First Aid- Eyes** | | 1. Move to the eyewash, forcibly hold eyelids open and begin flushing both eyes with water. 2. Remove contact lenses and eyewear while flushing (if applicable). 3. Dial **911** or have someone else dial **911**. 4. Keep flushing eyes under the eyewash until emergency personnel arrives. 5. Report incident to investigator/lab manager and EHS. | | | | | | | | | | | | | | |
| **First Aid- Skin** | | 1. Move to safety shower, pull shower handle, and flush affected area with water. 2. Remove contaminated clothing while flushing (if applicable). Do not pull clothes overhead. 3. Dial **911** or have someone else dial **911**. 4. Keep rinsing affected area until emergency personnel arrive. 5. Report incident to investigator/lab manager and EHS. | | | | | | | | | | | | | | |
| **First Aid- Inhalation** | | 1. Move to fresh air. 2. Dial **911** or have someone else dial **911**. 3. Report incident to investigator/lab manager and EHS. | | | | | | | | | | | | | | |
| **First Aid- Other** | | **Describe additional first aid procedures if required.** | | | | | | | | | | | | | | |
| **SECTION 10. REGULATED WASTE MANAGEMENT PROCEDURES (Select and describe waste management practices.)** | | | | | | | | | | | | | | | | |
| **Type of Waste** | **Waste Characteristics** | | | | | **Waste Management** | | | | | | | | | | |
| **Chemical** | **Corrosive**  **Ignitable**  **Reactive**  **Toxic** | | | | | *Describe how lab personnel will manage chemical wastes (e.g., Label with the words “Hazardous Waste,” use full chemical names (i.e., no abbreviations), keep waste containers closed, store with compatible wastes, etc.)* | | | | | | | | | | |
| **Biological** | **Solid**  **Liquid**  **Sharps**  **Animal Research** | | | | | *Describe how lab personnel will manage biological wastes (e.g., sharps disposed of in approved sharps containers, biomedical solid wastes collected in biohazard box-bag units, etc.).* | | | | | | | | | | |
| **Radioactive** | **Short half-life**  **Long half-life** | | | | | *Describe how lab personnel will manage radiological wastes (e.g., short half-life waste segregated by radionuclide, radioactive waste stored in containers provided by the Radiation Safety, etc.).* | | | | | | | | | | |
| **Other** |  | | | | |  | | | | | | | | | | |
| **SECTION 11. DECONTAMINATION PROCEDURES** | | | | | | | | | | | | | | | | |
| **Equipment** | *Describe how lab personnel will decontaminate equipment (e.g., use manufacturer instructions, specifications, etc.).* | | | | | | | | | | | | | | | |
| **Glassware** | *Describe how lab personnel will decontaminate glassware (e.g., beakers/flasks/test tubes, etc.).* | | | | | | | | | | | | | | | |
| **Work Area** | *Describe how lab personnel will decontaminate the work area (e.g., lab benches, fume hoods, etc.).* | | | | | | | | | | | | | | | |
| **Personal Hygiene** | *Describe the personal hygiene practices lab personnel must use to decontaminate (e.g., proper handwashing techniques, proper removal of gloves, etc.).* | | | | | | | | | | | | | | | |
| **SECTION 12A. LAB PERSONNEL APPROVAL** | | | | | | | | | | | | | | | | |
| I have reviewed and will follow the standard operating procedure (SOP) for the procedure listed above. I understand that further approval from the PI/Lab Manager is required if any of the following events occur:   * A change in amount (*Add quantity and/or volume*) or substitution of the chemicals in the procedure is planned * A change in the agreed-upon experimental set-up is planned * Signs of a failure in safety design or equipment are observed * Signs or symptoms of a chemical exposure are observed * Unexpected and/or potentially dangerous experimental results occur (e.g., fire, uncontrolled buildup of heat and/or pressure, etc.) | | | | | | | | | | | | | | | | |
| **Lab Personnel Name** | | | **Lab Personnel Signature** | | | | **Trainer Signature** | | | | | **Training Date** | | | | |
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| **Section 12B. PRINCIPAL INVESTIGATOR/LAB MANAGER APPROVAL** | | | | | | | | | | | | | | | | |
| ***I approve the contents of the lab-specific standard operating procedure listed above:*** | | | | | | | | | | | | | | | | |
| **Principal Investigator/Lab Manager Signature:** | | | | | | | | | | | **Date:** | | | | | |
| **A HARD OR ELECTRONIC COPY OF THE LSOP MUST BE READILY AVAILBALE IN THE LAB.** | | | | | | | | | | | | | | | | |