



Title of SOP: <b>General Use SOP for Sensitizers</b>		
SOP Originator:	Date Created:	Effective Date:
Name:	Name	Last edited Date:
EHS Reviewer:	Date Reviewed:	Document #:

**PURPOSE:**

This standard operating procedure (SOP) is intended to provide general guidance on how to safely work with sensitizers. As sensitizers often have other potential hazard characteristics such as carcinogenicity and corrosivity, ensure to account for these risks also. If you have questions concerning the applicability of any item listed in this procedure contact the Principal Investigator/Laboratory Supervisor of your laboratory or Environmental Health and Safety (5-4312).

**SCOPE:**

A sensitizer is a substance that can cause exposed people to develop an allergic reaction in normal tissue after repeated exposure to the substance. Examples of compounds that may cause sensitization in some individuals are diazomethane, various isocyanates, formaldehyde, and benzylic and allylic halides.

**APPLICABILITY:**

**Control of Hazard – General:**

Handling processes should be designed to minimize the potential for splash, splatter, or other likely scenarios for accidental contact.

**PROCEDURE:**

**Engineering/Ventilation Controls:**

Use a properly functioning lab fume hood when handling sensitizers that can be inhaled (via mist/fume/gas/vapor). If the process does not permit the handling of such materials in a fume hood, contact Environmental Health and Safety at 5-4312 for review the adequacy of ventilation measures.

**Personal Protective Equipment:**

In addition to proper street clothing (long pants (or equivalent) that covers legs and ankles, and close-toed non-perforated shoes that completely cover the feet), wear the following Personal Protective Equipment (PPE) when performing lab operations/tasks involving sensitizers:

- Safety glasses (if splash potential exists, use goggles + face shield instead)

- Lab coat (if working with large amounts of flammable materials ( $\geq 1$  liter), wear a fire-resistant lab coat, such as Nomex)
- Appropriate [chemical-resistant gloves](#)

### **Special Handling Procedures and Storage Requirements:**

Ensure secondary containment and segregation of incompatible chemicals per guidance within the [PSU Chemical Hygiene Plan](#). Also, follow any substance-specific storage guidance provided in MSDS documentation.

### **Spill and Accident Procedures:**

Prompt response to chemical spills is critical to protect worker health & safety and to mitigate adverse effects to the environment. For further guidance, refer to “[Spills and Accidents](#)”. Laboratory personnel who work with hazardous chemicals are to be provided the opportunity to receive medical attention/consultation when:

- A spill, leak, explosion or other occurrence results in a hazardous exposure (potential overexposure).
- Symptoms or signs of exposure to a hazardous chemical develop.

### **Waste Disposal:**

Many sensitizers intended for disposal may likely be considered hazardous wastes. For general guidance regarding waste disposal, refer to the EHS website about [Waste Management](#).

### **Minimum Training Requirements:**

- General Safety & Emergency Preparedness (Annually by EHS)
- Chemical Safety for Laboratories (Annually by EHS)
- Laboratory-specific training (As needed by PI)

### **Decontamination Procedures:**

Personnel: If immediate medical attention is required, call x9-911 (or x286 in the School of Medicine). Remove any contaminated clothing, and IMMEDIATELY flush contaminated skin with water for at least 15 minutes following any skin contact. For eye exposures, IMMEDIATELY flush eyes w/ water for at least 15 minutes. Consult [SDS](#) for guidance on appropriate first aid. Where medical attention is required, ensure to bring along SDS(s) of chemical(s) to aid medical staff in proper diagnosis and treatment.

Area: Carefully clean work area after use. Decontamination procedures vary depending on the material being handled.

### **Designated Area:**

For sensitizers that are also considered particularly hazardous substances, a designated area shall be established per the other applicable SOP(s).

### **ATTACHMENTS:**