

**IRRITANTS AND SENSITIZERS**

**STANDARD OPERATING PROCEDURE**

Type of SOP:       Process               Hazardous Chemical               Hazard Class

Department: \_\_\_\_\_ Building: \_\_\_\_\_ Room #: \_\_\_\_\_

Principal Investigator: \_\_\_\_\_ Phone #: \_\_\_\_\_

Prepared By: \_\_\_\_\_ Email: \_\_\_\_\_ Date: \_\_\_\_\_

**1. HAZARD OVERVIEW**



This SOP deals with two classes of related materials:

- Skin/Eye Irritants
- Sensitizers

Although they induce different health effects, these two classes of materials are similar in that they generally do not present a physical hazard (*fire, explosion, high reactivity*), and are of less concern than “Particularly Hazardous Substances” (*acute toxins, reproductive toxins*). Their primary hazards are their short-term and reversible affects via skin contact typically or inhalation. Therefore, the engineering controls and personal protective equipment used to protect an individual are generally the same for these classes of materials, but the Safety Data Sheet (SDS) for the particular material shall be consulted before beginning work.

**Definitions and Hazards**

- **Irritants** are chemicals that are not corrosives, but which can cause a reversible inflammatory effect on living tissue at the site of skin or eye contact, e.g., chlorine, alkalis, some solvents.
- **Sensitizers** are chemicals which cause a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical. Poison oak is a good example of a natural sensitizer.

**2. PERSONAL PROTECTIVE EQUIPMENT (PPE)**

At minimum, complete protection of the eyes and skin is essential. Additional or more protective PPE may be required. Please refer to the NJIT Chemical Hygiene Guide and Hazard Assessment Form to determine the proper PPE for handling corrosive materials.



**3. ENGINEERING/VENTILATION CONTROLS**

Please review the NJIT Chemical Hygiene Guide and the Safe Chemical Fume Hood Use Guide for information on the proper use of a chemical fume hood and criteria for implementing engineering controls.

Chemical Fume Hood      Glovebox      Biological Safety Cabinet      Other \_\_\_\_\_

Room Location of Unit(s): \_\_\_\_\_

#### 4. SPECIAL HANDLING PROCEDURES AND STORAGE REQUIREMENTS

Careful handling and stringent controls are essential in order to minimize risk to researchers and the environment. Direct contact must be avoided when handling these materials. This SOP describes the baseline requirements for handling these classes of materials. There are many cases where specific chemical entities require additional or modified handling procedures.

- Avoid working alone with hazardous materials.
- Eliminate or substitute for a less hazardous material when possible.
- Design your experiment to use the least amount of material possible to achieve the desired result.
- Do not exceed the scale or deviate from the experimental parameters which may be outlined in the lab-specific information section below without the approval of the PI.
- All hazardous materials must be labeled with their identity as well as all applicable warning statements. Manufacturer labels will contain all the necessary information. However, if material is repackaged or synthesized in the laboratory, please follow the chemical labeling requirements explained in the NJIT Chemical Hygiene Guide.

#### 5. INCIDENTS AND ACCIDENTS

Laboratory personnel are to report all occupational injuries or illnesses to Faculty/PI as soon as practical. The Faculty/PI and laboratory personnel must submit the required paperwork to NJIT EHS Department. See the the Emergency Response Guidelines posted in the laboratory or Emergency Procedures section of the NJIT CHG for proper procedures involving an injury, exposure, fire, or release/spill of a hazardous material.

**In the event of an emergency, DIAL 9-1-1 to activate emergency response personnel.**

#### 6. SPILL AND DECONTAMINATION

Wear proper PPE. Decontaminate equipment and bench tops using soap and water, or other appropriate decontamination/cleaning solution. Dispose of all used contaminated disposables in the appropriate waste stream following the Waste Disposal Section of the NJIT CHG.

Decontamination Solution(s): \_\_\_\_\_

**Additional Spill / Decontamination Requirements:**

#### 7. WASTE DISPOSAL

Follow the practices and procedures in accordance with the NJIT Laboratory Waste Management Program to properly dispose of waste.

**Additional Waste Disposal Requirements:**

**8. PRIOR APPROVAL/REVIEW**

**9. DESIGNATED USE AREA**

Designated Use Area Location(s): \_\_\_\_\_

**10. SAFETY DATA SHEETS**

Location of SDS: \_\_\_\_\_

**11. LAB-SPECIFIC INFORMATION (required) ([Examples](#) of appropriate content)**