

Standard Operating Procedures (SOP) Template

INSTRUCTIONS

This standard operating procedure describes the baseline requirements for handling a hazardous chemical or class of chemicals. To customize this SOP, complete the fields with lab-specific information, as applicable. In the field above "Standard Operating Procedure (SOP)", please put the chemical name if blank. **Completion of the last section ("Lab-Specific Information") is required.**

1. HAZARD OVERVIEW

Please select hazards representative of this material and the main routes of exposure. Please review the Safety Data Sheet (SDS) for the material and the [NJIT Chemical Hygiene Guide \(CHG\)](#) for more information.

General information about working with hazardous chemicals can be found for free in [Prudent Practices in the Laboratory](#), National Research Council, 2011.

2. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Select the appropriate PPE required for use with this material. At minimum, complete protection of the eyes and skin is essential. See the PPE section of the New Jersey Institute of technology (NJIT) Chemical Hygiene Guide (CHG) and PPE Program for information on PPE determination. Please detail any additional PPE requirements and specify the type of PPE if necessary (*e.g. type of respirator – N95, type of glove -- Thermal, type of safety glasses – laser protection, etc.*).

3. ENGINEERING/VENTILATION CONTROLS

Select the appropriate engineering control required for use with this material. Hazardous substances should always be used in a fume hood, glove box, or in totally-sealed containers to prevent potential exposure. For more information, see the Control Methods section of the NJIT CHG. Please detail any additional information on use and/or maintenance requirements.

4. SPECIAL HANDLING PROCEDURES & STORAGE REQUIREMENTS

Please detail any additional information on handling and storage requirements. If no additional requirements, please write "None".

5. INCIDENTS and ACCIDENTS

See the Emergency Procedures section of CHG for detailed information on emergency procedures.

6. SPILL and DECONTAMINATION

Please detail any additional information on spill/decontamination procedures such as spill control, cleaning processes and frequency. If no additional requirements, please write "None".

7. WASTE DISPOSAL

As they deem necessary, the Faculty/PI should insert here any specific waste procedures or information for these substances. If no additional requirements, please write "None".

8. PRIOR APPROVALS

As they deem necessary, the Faculty/PI should insert here any prior approval or review needed, before an individual can do the operation.

9. DESIGNATED USE AREA

As necessary, the Faculty/PI should insert here any information about whether a special use area is designated for this material/process, and post a completed Designated Work Area sign. Please contact EHS for signs. See Appendix Q of the NJIT CHG for an example of the sign.

10. LAB SPECIFIC INFORMATION

Add appropriate lab-specific information here describing how this material(s) is generally used (*e.g. name of associated protocol(s), typical work frequency, quantities used, temperature requirements and any additional safety measures, etc.*).

STANDARD OPERATING PROCEDURE (SOP)

Type of SOP: Process Hazardous Chemical Hazard Class

Department: **Building:** **Room #:**

Principal Investigator: **Phone #:**

Prepared By: **Email:** **Date:**

1. HAZARD OVERVIEW



CORROSIVE



FLAMMABLE



EXPLOSIVE



OXIDIZING



TOXIC



HEALTH HAZARD



GAS UNDER PRESSURE



CANCERAGENT

Route of Exposure: Absorption/Contact Injection Inhalation Ingestion

Additional Information:

2. PERSONAL PROTECTIVE EQUIPMENT (PPE)



SAFETY GLASSES



SAFETY GOGGLES



FACE SHEILD



LAB COAT



APRON



GLOVES



RESPIRATOR

Additional PPE Requirements:

3. ENGINEERING/VENTILATION CONTROLS

Chemical Fume Hood Glovebox Biological Safety Cabinet Other _____

Room Location of Unit(s): _____

Additional Engineering Control Requirements:

4. SPECIAL HANDLING PROCEDURES & STORAGE REQUIREMENTS

- 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 protocols described in the Labeling section of the NJIT CHP.

Additional Handling & Storage Requirements:

5. SPILL AND INCIDENT PROCEDURES

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 Emergency Procedures section of the NJIT CHP for proper procedures involving an injury, exposure, or release/spill.

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

6. DECONTAMINATION

Wear proper PPE. Decontaminate equipment and work surfaces with appropriate decontamination/cleaning solution. Dispose of all used contaminated disposables in the appropriate waste stream following the Waste Disposal Section of the NJIT CHP.

Decontamination Solution(s): _____

Additional 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 Decontamination 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)