

Title:

Number	Revision	Date	Pages 1 of
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**1.0 PURPOSE**

- Restate and expand the title.

**2.0 SCOPE**

- Describe to whom and what the SOP applies to.

**3.0 RESPONSIBILITIES**

- List who is responsible (by job title) for performing work, maintaining records, providing training and ensuring that this procedure is carried out.

**4.0 DEFINITIONS**

- List any terms, acronyms or abbreviations used that might not be commonly understood by a person new to this SOP.

**5.0 HEALTH AND SAFETY WARNINGS**

- List all Personal Protective Equipment needed for procedure.
- List hazards of chemicals used in procedure.
- List any special emergency equipment needed (eyewash, spill kit)
- List waste disposal requirements (amalgam, chemical waste)

**6.0 MATERIALS**

- List chemicals and equipment needed for procedure. Be specific. Include chemical concentrations, catalog numbers, equipment names, model numbers, etc. Include any chemical or equipment set up procedures that need to be done before procedure can proceed (e.g. warm up water, dilute bleach, test glut levels). Cross reference any other SOPs for these procedures. Describe how to obtain equipment.

**7.0 PROCEDURES**

- List a step-by-step description of the procedure in chronological manner using active verbs and direct statements. Describe any anticipated problems that may occur while performing this SOP, the course of action to be taken, including the job title to consult/report to if problem occurs.

**8.0 REPORTING AND DOCUMENTATION**

- Describe any logs, reports or other documentation needed or produced during this SOP. Describe where records are kept.

**9.0 REFERENCES**

- List other SOPs, regulations or references relating to this SOP.

**10.0 ATTACHMENTS, FORMS, CHECKLISTS**

**11.0 REVIEWS AND REVISIONS**

- List review cycle (e.g. annually) and procedure (e.g. supervisor, committee). Include author & approval signatures.

	<b>Signature</b>	<b>Job Title</b>	<b>Date</b>
This SOP was written by:			
This SOP was reviewed by:			
This SOP was approved by:			

Process: \_\_\_\_\_ Date: \_\_\_\_\_

**Chemical Hazards:** Check all hazards for the chemicals used in this procedure. Attach list of chemicals.

<input type="checkbox"/> allergic reaction, sensitizer	<input type="checkbox"/> poison
<input type="checkbox"/> cancer or carcinogen	<input type="checkbox"/> poison inhalation hazard (gas _____)
<input type="checkbox"/> corrosive	<input type="checkbox"/> pyrophoric
<input type="checkbox"/> explosive	<input type="checkbox"/> reproductive effects: __ mutagen __ teratogen
<input type="checkbox"/> __ flammable __ combustible (select one)	<input type="checkbox"/> reactive
<input type="checkbox"/> heavy metals	<input type="checkbox"/> __ toxic __ acute __ highly or extremely toxic (select one)
<input type="checkbox"/> lachrymator	<input type="checkbox"/> __ unstable __ highly unstable (select one)
<input type="checkbox"/> oxidizer	<input type="checkbox"/> water reactive
<input type="checkbox"/> peroxide, peroxide forming	<input type="checkbox"/> unknown hazard
<input type="checkbox"/> target organ effect: __ hepatotoxin __ nephrotoxin __ neurotoxin __ hematopoietec __lungs, skin, eyes, mucous membranes	

**Biological Hazards:** Name of Organism: \_\_\_\_\_

BSL: \_\_\_\_\_

<input type="checkbox"/> tissue culture: cell:	<input type="checkbox"/> virus	<input type="checkbox"/> fungus	<input type="checkbox"/> Animal (live - IACUC Approval):
<input type="checkbox"/> rDNA: IBC approval:	<input type="checkbox"/> bacteria	<input type="checkbox"/> yeast	<input type="checkbox"/> Animal tissue
<input type="checkbox"/> human blood, OPIM	<input type="checkbox"/> toxin	<input type="checkbox"/> select agent	<input type="checkbox"/> Other:

**Process Hazards:** Specify source when necessary.

<input type="checkbox"/> machinery/ tools	<input type="checkbox"/> high vacuum, high pressure
<input type="checkbox"/> high noise levels	<input type="checkbox"/> cryogenic
<input type="checkbox"/> compressed gas cylinders	<input type="checkbox"/> high voltage, high current
<input type="checkbox"/> other:	<input type="checkbox"/> high temperature, exothermic
<input type="checkbox"/> nonionizing radiation: <input type="checkbox"/> microwave <input type="checkbox"/> ultrasound <input type="checkbox"/> ultraviolet <input type="checkbox"/> infrared <input type="checkbox"/> laser (Class: _____ )	
<input type="checkbox"/> ionizing radiation: <input type="checkbox"/> x-ray <input type="checkbox"/> sealed RAM <input type="checkbox"/> unsealed RAM	

**Health and Safety Requirements:**

<input type="checkbox"/> eye protection, type:	<input type="checkbox"/> gloves, type:	<input type="checkbox"/> respirator, type:
<input type="checkbox"/> face shield	<input type="checkbox"/> earplugs/muffs	<input type="checkbox"/> protective clothing, type:
<input type="checkbox"/> shield	<input type="checkbox"/> local ventilation, type:	<input type="checkbox"/> emergency lights
<input type="checkbox"/> radiation badge	<input type="checkbox"/> warning signs, lights, alarms	<input type="checkbox"/> medical surveillance
<input type="checkbox"/> decontamination	<input type="checkbox"/> ultraviolet light	<input type="checkbox"/> exposure monitoring
<input type="checkbox"/> fume hood, insp:	<input type="checkbox"/> biosafety cabinet, insp.:	<input type="checkbox"/> other:

**Disposal Procedures:**

<input type="checkbox"/> chemical hazardous waste (EPA Listed, flammable, toxic, corrosive, or reactive)	<input type="checkbox"/> acutely hazardous waste (EPA P & U List)	<input type="checkbox"/> regulated medical waste __ Red Bag __ Sharps Container
<input type="checkbox"/> neutralize with:	<input type="checkbox"/> other:	<input type="checkbox"/> autoclave & regulated medical waste

**Experience:** Which of the following are you relatively inexperienced with or are not previously documented?

<input type="checkbox"/> chemicals or synergistic effects	<input type="checkbox"/> quantities used	<input type="checkbox"/> procedures
<input type="checkbox"/> concentration used	<input type="checkbox"/> equipment	<input type="checkbox"/> other

<b>Standard Operating Procedure</b>	
<b>Title:</b>	<b>Date:</b>
<b>1. Procedure/Hazardous Material:</b>	
<b>2. Department:</b>	
<b>3. Revision Date:</b>	
<b>4. Special Notifications:</b>	
<b>5. Hazard Description:</b> <i>Hazards –</i> <i>Exposure -</i> <i>Risks -</i>	
<b>6. Engineering Controls:</b>	
<b>7. Personal Protective Equipment:</b>	
<b>8. Storage Requirements:</b>	
<b>9. Handling Precautions/Conditions:</b>	
<b>10. Emergency Procedures:</b>	
<b>11. Decontamination:</b>	
<b>12. Waste Disposal:</b>	
<b>13. Laboratory Specific Procedures:</b>	
<b>14. Additional References</b> <ul style="list-style-type: none"> <li>• Material Safety Data Sheet</li> <li>• <i>Prudent Practices</i> <a href="http://www.nap.edu/catalog/4911.html">http://www.nap.edu/catalog/4911.html</a> (read it online for free)</li> </ul> <p><u>Prudent Practices for Safety in Laboratories</u> provides step-by-step planning procedures for handling, storage, and disposal of chemicals. Organized around a recommended workflow protocol for experiments, the book offers prudent practices designed to promote safety and it includes practical information on assessing hazards, managing chemicals, disposing of wastes, and more.</p>	