



Chemical Standard Operating Procedure

All work involving materials classified as Particularly Hazardous requires the completion of Section 6.

Procedure Name					
Procedure Author					
Name of Responsible Person					
Location to be Performed					
Creation Date			Review Date(s)		Revision Date(s)
1.	THIS STANDARD OPERATING PROCEDURE (SOP) IS FOR A:				
	<input type="checkbox"/> Specific laboratory procedure or experiment <ul style="list-style-type: none"> Examples: synthesis of chemiluminescent esters <input type="checkbox"/> Generic laboratory procedure that covers several chemicals <ul style="list-style-type: none"> Examples: distillation, chromatography <input checked="" type="checkbox"/> Generic use of a specific chemical or class of chemicals with similar hazards <ul style="list-style-type: none"> Examples: Organic azides, mineral acids, hydrofluoric acid 				
2.	DESCRIPTION: <i>Briefly describe how the chemical will be used.</i>				
	Perfusions of animals using fixative solutions (e.x. paraformaldehyde, formalin)				
3.	RISK IDENTIFICATION: <i>Identify potential safety hazards – refer to Section 2 of the SDS.</i>				
	<input type="checkbox"/> Explosive <input type="checkbox"/> Pyrophoric <input type="checkbox"/> Flammable (liquid, solid, gas or aerosol) <input type="checkbox"/> Self-Reactive <input type="checkbox"/> Peroxide Forming <input type="checkbox"/> Organic Peroxide <input type="checkbox"/> Oxidizing (liquid, solid or gas) <input type="checkbox"/> Water-Reactive <input type="checkbox"/> Compressed Gases <input type="checkbox"/> Cryogen <input type="checkbox"/> Corrosion to Metals <input type="checkbox"/> Radionuclides <input type="checkbox"/> Other: Click or tap here to enter text.		<input checked="" type="checkbox"/> Carcinogen <input type="checkbox"/> Sensitizer (respiratory and/or skin) <input checked="" type="checkbox"/> Irritant (skin and/or eye) <input type="checkbox"/> Corrosive (skin and/or eye damage) <input type="checkbox"/> Acute Toxicity (oral, dermal and/or inhalation) <input checked="" type="checkbox"/> Germ Cell Mutagen <input type="checkbox"/> Reproductive Toxicity <input type="checkbox"/> Target Organ Systemic Toxicity: Single Exposure <input type="checkbox"/> Target Organ Systemic Toxicity: Repeated Exposure <input checked="" type="checkbox"/> Other: causes serious eye damage		
	Notes (include chemicals that will be used, additional cautions, permissible exposure limits, etc.):				



4.	<p>WHAT ENGINEERING CONTROLS WILL BE USED TO MINIMIZE EXPOSURES TO THESE HAZARDS? <i>select all that apply</i></p> <p> <input checked="" type="checkbox"/> Fume Hood <input type="checkbox"/> Snorkel <input type="checkbox"/> Glove Box <input type="checkbox"/> Clean Room <input type="checkbox"/> Explosion Shielding <input type="checkbox"/> Splash Shielding <input type="checkbox"/> Beta Shielding <input type="checkbox"/> Safety Storage Cabinet <input type="checkbox"/> Flammable Storage Refrigerator <input checked="" type="checkbox"/> Other: Downdraft perfusion table </p>						
5.	<p>WHAT PERSONAL PROTECTIVE EQUIPMENT IS REQUIRED TO MINIMIZE THESE HAZARDS? <i>select all that apply</i></p> <p> <input checked="" type="checkbox"/> Safety Glasses <input checked="" type="checkbox"/> Lab Coat <input type="checkbox"/> Fire-Resistant Lab Coat <input checked="" type="checkbox"/> Gloves - specify type: Click or tap here to enter text. <input type="checkbox"/> Acid Resistant Gloves <input type="checkbox"/> Acid Resistant Apron <input type="checkbox"/> Face shield <input type="checkbox"/> Other: Click or tap here to enter text. </p>						
6.	<p>STEP-BY-STEP OPERATING PROCEDURE</p> <p><i>Provide a sequential description of work, including as much detail as possible such as designated work area(s), chemical concentrations ranges and amount used (mass, volume) and when special safety equipment is to be utilized. Include temperature, pressure, and other experimental conditions if possible. Pictures and schematics are recommended for complex setups. Highlight the steps with the highest hazards.</i></p> <ol style="list-style-type: none"> 1. Step by step description of processes. 2. Step 						
7.	<p>TRANSPORT, RECEIVING AND STORAGE REQUIREMENTS <i>Describe transport, receiving and storage requirements. Include secondary containment, transport devices (carts, carriers, etc.), segregation requirements, any special temperature or atmospheric requirements, and container compatibility requirements. Information may be included in Section 6.</i></p> <table border="1" data-bbox="324 1738 1380 1894"> <thead> <tr> <th data-bbox="324 1738 852 1791"><i>Chemical name</i></th> <th data-bbox="852 1738 1380 1791"><i>Storage location/requirement</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="324 1791 852 1843"></td> <td data-bbox="852 1791 1380 1843"></td> </tr> <tr> <td data-bbox="324 1843 852 1894"></td> <td data-bbox="852 1843 1380 1894"></td> </tr> </tbody> </table>	<i>Chemical name</i>	<i>Storage location/requirement</i>				
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8.	<p>WASTE DISPOSAL</p>						
	<p>Type of waste generated by this procedure/process (<i>check all that apply</i>): <input type="checkbox"/> Solid <input checked="" type="checkbox"/> Liquid</p> <p>Waste hazard determination (<i>check all that apply</i>):</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Type of Waste</th> <th style="text-align: left;">Hazard Determination</th> </tr> </thead> <tbody> <tr> <td>Solid</td> <td><input type="checkbox"/> Flammable <input type="checkbox"/> Oxidizer <input type="checkbox"/> Corrossive <input type="checkbox"/> Reactive <input type="checkbox"/> Toxic</td> </tr> <tr> <td>Liquid</td> <td><input type="checkbox"/> Flammable <input type="checkbox"/> Oxidizer <input type="checkbox"/> Corrossive <input type="checkbox"/> Reactive <input type="checkbox"/> Toxic</td> </tr> </tbody> </table> <p>Expected waste generation per experiemntal run (mass/volume): Click or tap here to enter text.</p> <p>Disposal procedure and location of Satellite Accumulation Area: Do not pour paraformaldehyde waste into sinks or drains; Waste and unused solutions must be collected for proper disposal; and Waste solutions must be placed in tightly sealed, labeled containers and segregated for disposal via the EH&S Hazardous Waste Management.</p>	Type of Waste	Hazard Determination	Solid	<input type="checkbox"/> Flammable <input type="checkbox"/> Oxidizer <input type="checkbox"/> Corrossive <input type="checkbox"/> Reactive <input type="checkbox"/> Toxic	Liquid	<input type="checkbox"/> Flammable <input type="checkbox"/> Oxidizer <input type="checkbox"/> Corrossive <input type="checkbox"/> Reactive <input type="checkbox"/> Toxic
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9.	<p>EMERGENCY PROCEDURES</p> <p><i>Indicate how spills, personnel exposure/injury, and other accidents should be handled and by whom.</i></p>						
	<p>Refer to Emergency Information Sheet</p>						