



Personal Protective Equipment (PPE)

This SOP is not a substitute for hands-on training.

Print a copy and insert into your laboratory SOP binder.

Department:	Chemistry
Date SOP was written:	8/1/2018
Date SOP was approved by PI/lab supervisor:	
Principal Investigator:	Name: Richmond Sarpong Signature: _____
Internal Lab Safety Coordinator or Lab Manager:	Name: Melissa Hardy/Justin Jurczyk Lab Phone: 406-696-1225/412-728-1952 Office Phone: 510-642-6312
Emergency Contact:	Name: Melissa Hardy/Justin Jurczyk Lab Phone: 406-696-1225/412-728-1952
Location(s) covered by this SOP:	805,832,834,836,837,838,839,842,844,847,849

1. Purpose

This SOP covers the use of personal protective equipment (PPE) in the Hartwig lab.

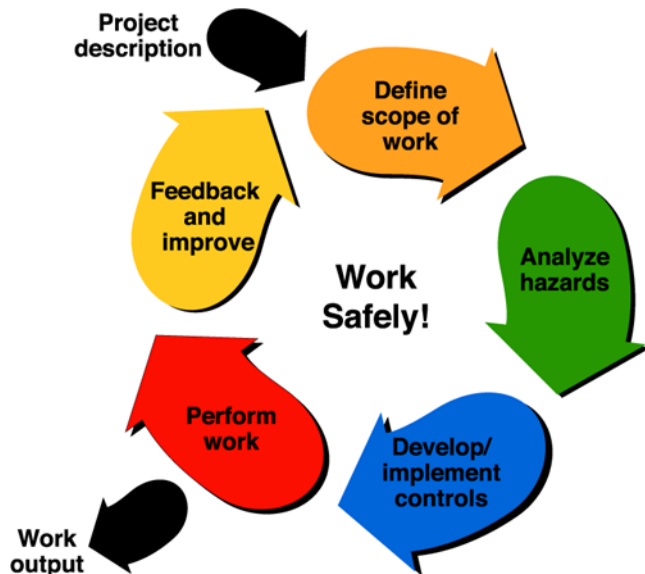
If you have questions concerning the applicability of any recommendation or requirement listed in this procedure, contact the Principal Investigator/Laboratory Supervisor or the campus Chemical Hygiene Officer at ucbcho@berkeley.edu.

2. Personal Protective Equipment Information

Personal protective equipment is used to protect researchers from chemical exposures or physical hazards. Examples of personal protective equipment are lab coats, gloves, safety glasses, splash goggles, and face shields.



-Take Ownership of Your Safety-



Before starting any work, ask yourself:

- 1- **What will I be doing?**
- 2- **Do I know what the hazards are?**
- 3- **Do I have everything I need to do the job safely?**
- 4- **Am I doing the job safely?**
- 5- **What can we do better?**



12. Protocol/Procedure for– Personal Protective Equipment (PPE)

Procedure/Use	PPE (eye, face, gloves, clothing)	Procedure Steps and Special Precautions for this Procedure
<p>Work that requires the use of a fume hood – includes but is not limited to the manipulation of liquids, gases, and volatile solids.</p>	<p>Eye protection: Wear ANSI Approved tight-fitting safety goggles or safety glasses with side shields. Wear goggles instead of safety glasses when there is a risk of splashing or aerosol.</p> <p>Face Protection: Face shields are to be used when there is no protection from the hood sash or if there is a splash or explosion risk.</p> <p>Hand Protection: Confirm compatibility of glove material with chemical being used. General guidance (unless otherwise specified in the specific SDS): Nitrile gloves must be used to prevent incidental contact. For spill handling or for potential contact with larger quantities, use double nitrile or heavier gauge nitrile or neoprene gloves. Gloves must be inspected prior to use. Wash and dry hands after use.</p> <p>Clothing: Wear lab coat; full length pants or equivalent; and close-toed, close-heeled shoes.</p>	<p>When a fume hood is not in use, the sashes must be closed to an appropriate level as designated by the arrows on the fume hood.</p>
<p>Notes</p>	<p>Any deviation from this SOP requires approval from PI.</p>	



Procedure/Use	PPE (eye, face, gloves, clothing)	Procedure Steps and Special Precautions for this Procedure
Work that can be performed at a benchtop without the use of a fume hood.	<p>Eye protection: Wear ANSI Approved tight-fitting safety goggles or safety glasses with side shields. Wear safety goggles instead of safety glasses when there is a risk of splashing or aerosol.</p> <p>Face Protection: Face shields are to be used if there is a splash or explosion risk.</p> <p>Hand Protection: Confirm compatibility of glove material with chemical being used. General guidance (unless otherwise specified in the specific SDS): Nitrile gloves must be used to prevent incidental contact. For spill handling or for potential contact with larger quantities, use double nitrile or heavier gauge nitrile or neoprene gloves. Gloves must be inspected prior to use. Wash and dry hands after use.</p> <p>Clothing: Wear full length pants or equivalent; and close-toed, close-heeled shoes. A lab coat is required.</p>	<p>Work that can be performed on a benchtop must pose low hazard risk, where the chemicals being used are not volatile and pose no health risks.</p> <p>If there is a potential where an action can lead to dermal chemical exposure, then a lab coat is required.</p> <p><i>Specific actions that can be done at a benchtop but requires a lab coat:</i></p> <ul style="list-style-type: none"> Washing glassware Transferring any vessel containing a chemical that can pose a health risk if spilled Manipulations involving aqueous solutions Handling cryogenic liquids such as liquid nitrogen Removing or adding glassware to an acid or base bath Transferring waste into a liquid waste container Changing pump oil Cleaning chemical spills
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Procedure/Use	PPE (eye, face, gloves, clothing)	Procedure Steps and Special Precautions for this Procedure
Work in a chemical-free zone	<p>Eye protection: Wearing ANSI Approved tight-fitting safety goggles or safety glasses with side shields is recommended but not required.</p> <p>Clothing: Lab coats and gloves cannot be worn in a chemical-free zone.</p>	<p>A chemical-free zone is an area where chemicals cannot be brought and manipulated. It is also forbidden to bring PPE (including, but not limited to lab coats and gloves) into these areas to avoid second-hand contamination with chemicals. The exception to this rule is eye protection.</p> <p>Chemical-free areas are the areas immediately surrounding desks and the break room.</p>
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Procedure/Use	PPE (eye, face, gloves, clothing)	Procedure Steps and Special Precautions for this Procedure
Working inside a glove box	<p>Eye protection: Wearing ANSI Approved tight-fitting safety goggles or safety glasses with side shields is recommended but not required.</p> <p>Hand Protection: Cotton gloves.</p> <p>Clothing: Wear full length pants or equivalent; and close-toed, close-heeled shoes. Lab coats may NOT be worn in the glovebox</p>	<p>Do not wear a lab coat in the glovebox.</p> <p>Only clean, non-contaminated gloves can be used with a glovebox.</p> <p>When removing chemicals or waste from a glovebox, ensure that these materials are safe to handle in an aerobic and moist environment.</p>
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Procedure/Use	PPE (eye, face, gloves, clothing)	Procedure Steps and Special Precautions for this Procedure
Using a chemical refrigerator or freezer	<p>Eye protection: Wearing ANSI Approved tight-fitting safety goggles or safety glasses with side shields is required.</p> <p>Hand Protection: Nitrile gloves are required.</p> <p>Clothing: Wear full length pants or equivalent; and close-toed, close-heeled shoes. A lab coat is required.</p>	<p>A chemical carrier is required for moving chemicals from one room to another that exceed 15 g in weight or 50 mL in volume.</p> <p>Be sure that the refrigerator or freezer is fully closed when done to discourage excessive condensation of atmospheric water on, e.g., pyrophoric materials. Excessive ice buildup can also damage containers and impede physical access to chemicals, leading to breakages.</p> <p>Chemical refrigerators and freezers are restricted to chemicals only; no personal items, including food and beverages, may be stored in laboratory refrigerators and freezers.</p>
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Procedure/Use	PPE (eye, face, gloves, clothing)	Procedure Steps and Special Precautions for this Procedure
Using the chemical inventory in 834/839/849.	<p>Eye protection: Wearing ANSI Approved tight-fitting safety goggles or safety glasses with side shields is required.</p> <p>Hand Protection: Nitrile gloves are required.</p> <p>Clothing: Wear full length pants or equivalent; and close-toed, close-heeled shoes. A lab coat is required.</p>	<p>A chemical carrier is required for moving chemicals from one room to another that exceed 15 g in weight or 50 mL in volume.</p>
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