



Research Laboratory Hazard Assessment and Personal Protective Equipment Use

All new researchers (undergraduate students, graduate students, postdoctoral scholars, and research staff) must complete this worksheet. The goals are to insure knowledge of hazards that might be encountered in the research laboratory and to insure knowledge of how Personal Protective Equipment is used to avoid injury.

NAME _____

EMAIL _____ EXTENSION _____

STEP 1: Hazard Identification

Review potential chemical hazards and the recommended Personal Protective Equipment using the second page of this document.

Initials: _____

STEP 2: General Training for Personal Protective Equipment

Review the PowerPoint presentation on PPE Use for Research laboratories at <http://www.chemistry.ucla.edu/pages/safety>.

Initials: _____

STEP 3: Lab Specific Training for Personal Protective Equipment

With the Faculty Advisor, Supervisor, or Lab Safety Officer:

- Discuss what types of PPE are used in the lab.
- Discuss when PPE is necessary in the lab.
- Discuss how to obtain PPE for this lab.
- Discuss how to wear, adjust, and use PPE for this lab.
- Discuss proper care, maintenance, useful life, and disposal of the PPE for this lab.
- Discuss the limitations of the PPE for this lab.
- Discuss proper PPE practices including not wearing PPE outside of lab hazard areas.
(e.g. in hallways and eating areas)

Initials: _____

STEP 4: Documentation

Send a copy of this page to the Chemical Safety Officer.
Save this sheet in the Training Records section of the Laboratory Safety Manual.

SIGNATURE _____ DATE _____

SIGNATURE (Faculty Advisor or Supervisor) _____ DATE _____

Chemical Use Hazards

Activity	Potential Hazards	Recommended PPE
Working with small volumes (<4 liters) of corrosive liquids.	Eye or skin damage.	Safety glasses or goggles Light chemical-resistant gloves Lab coat.
Working with small volumes (<4 liters) of corrosive liquids, small to large volumes of acutely toxic corrosives, or work which creates a splash hazard.	Poisoning, increased potential For eye or skin damage.	Safety goggles Heavy chemical-resistant gloves Lab coat and chemical resistant Apron.
Working with small volumes (<4 liter) of organic solvents or flammable organic compounds.	Skin or eye damage, potential poisoning through skin contact.	Safety glasses or goggles. Light chemical-resistant gloves. Lab coat.
Working with large volumes (>4 liter) of organic solvents, small to large volumes of very dangerous solvents, or work which creates a splash hazard.	Major skin or eye damage, potential poisoning through skin contact. Fire.	Safety goggles. Heavy chemical-resistant gloves. Flame-resistant lab coat (e.g. Nomex).
Working with toxic or hazardous chemicals (solid, liquid, or gas).	Working with toxic or hazardous chemicals (solid, liquid, or gas).	Safety glasses (goggles for large quantities). Light chemical-resistant gloves. Lab coat.
Working with acutely toxic or hazardous chemicals (solid, liquid, or gas).	Increased potential for eye or skin damage, increased potential poisoning through skin contact.	Safety goggles. Heavy chemical-resistant gloves. Lab coat.
Working with an apparatus with contents under pressure or vacuum.	Eye or skin damage.	Safety glasses or goggles, face shield for high risk activities. Chemical-resistant gloves. Lab coat, chemical-resistant apron for high risk activities.
Working with air or water reactive chemicals.	Severe skin and eye damage. Fire.	Work in inert atmosphere, when possible Safety glasses or goggles. Chemical-resistant gloves. Lab coat, flame resistant lab coat for high risk activities (e.g. Nomex). Chemical- resistant apron for high risk activities.
Working with potentially Explosive chemicals.	Splash, detonation, flying debris, skin and eye damage, fire.	Safety glasses, face shield, and blast shield. Heavy gloves. Flame-resistant lab coat (e.g. Nomex).
Working with low and high temperatures.	Burns, splashes, fire.	Safety glasses. Lab coat. Thermally insulated gloves, when needed.
Minor chemical spill cleanup.	Skin or eye damage, respiratory damage.	Safety glasses or goggles. Chemical-resistant gloves. Lab coat. Chemical-resistant apron and boot/shoe covers for high risk activities. Respirator as needed. Consider keeping Silver Shield gloves in the lab spill kit.