

## Chemical Hazards : Are the following activities performed in the lab?

Yes	No	Activity	Potential Hazard	Applicable PPE
		Are you working inside a laboratory where chemicals manipulations are carried out?	Chemical exposure to the body, face, or hand.	At a minimum ANSI approved safety glasses, appropriate gloves, and a laboratory coat.  See the <a href="#">chemical glove compatibility chart</a> for help identifying gloves for laboratory use.
		Are you working with large volumes (>4 liters) of flammable organic compounds?	Chemical exposure to the body, face, hand, and possible fire.	At a minimum ANSI approved safety glasses, appropriate gloves, and a laboratory coat.  See the <a href="#">chemical glove compatibility chart</a> for help identifying gloves for laboratory use.
		Are you working with large volumes (>4 liters) of corrosive liquids that can create a splash hazard?	Chemical burns to face, hands, and body. Acids cause burns but bases vigorously attack proteins such as those in the eyes.	At minimum wear ANSI approved safety goggles, heavy, appropriate chemical resistance gloves (ex. Neoprene), and lab coat.  See the <a href="#">chemical glove compatibility chart</a> for help identifying gloves for laboratory use.
		Are you working with acutely toxic chemicals or OSHA regulated carcinogens?	Carcinogens specifically target certain parts of the body and cause cancer.	Please call 2273 or email <a href="mailto:jskreen@lcc.ctc.edu">jskreen@lcc.ctc.edu</a> for guidance on appropriate  PPE and engineering controls.  See the Select Carcinogens Section of the CHP for procedures regarding select carcinogens.
		Are you working with air or water reactive chemicals?	Spontaneous fires, hydrogen gas fires, toxic gas by-products, and explosions are possible.	Work in inert atmosphere such as a glove box when possible. Safety glasses must be used at a minimum. Appropriate chemical-resistant gloves. A flame resistant lab coat should be used (e.g. Nomex).  See the <a href="#">chemical glove compatibility chart</a> for help identifying gloves for laboratory use.
		Are you working with potentially explosive chemicals?	All explosive work requires a permit from EHSO. Danger to the public and possible death to the user.	No PPE is available to protect anyone from explosive materials; engineering controls are the only solution. Call 6-7411 immediately.

		<p>Are you working with perchloric acid?</p>	<p>Severe burns to the entire body. Perchloric Acid is a strong oxidizer that can result in explosions when in contact with flammable materials and certain metals.</p>	<p>At minimum wear ANSI approved safety goggles, heavy, appropriate chemical resistance gloves (ex. Neoprene), and lab coat.</p> <p>Engineering controls need to be implemented to ensure fume hoods do not explode.</p>
		<p>Are you working with Hydrofluoric acid (HF)?</p> <p>Calcium Gluconate, the antidote to HF, must be available when using this corrosive liquid.</p>	<p>HF can be fatal if absorbed into the skin. It is also a strong corrosive and causes severe burns. It damages bone marrow and contact with metals can cause a hydrogen fire.</p>	<p>At minimum wear ANSI approved safety goggles or face shield, heavy chemical resistance gloves (ex. Neoprene), including boots or safety shoes with polyvinyl chloride (PVC) or neoprene, as well as a lab coat.</p>
		<p>Are you working with peroxidizable chemicals?</p>	<p>Peroxides have the potential to generate and accumulate peroxide crystal formations which may violently detonate when subjected to thermal or mechanical shock.</p>	<p>No amount of PPE can protect you from an explosion. Proper storage away from the sun, heat fluctuations, and dating/using all of the material before six months is recommended.</p>