

Guidance: UCSB Teaching Laboratories
Personal Protective Equipment Requirements and Determining Appropriate Safety Eyewear

Per UC policy and Cal-OSHA regulations, lab workers must have/use the appropriate personal protective equipment. Teaching labs have the same requirements as research labs and the course supervisor is responsible for implementing the policy - [click here](#) for summary.

There are two basic forms of safety eyewear available. It is important that the course manager/instructor be aware of which eyewear is appropriate with respect to the hazards to which the students will be exposed and implement accordingly. The two forms of safety eyewear available are:

- 1. Safety glasses:** Most prescription ‘street’ glasses do not meet the requirements for lab safety eyewear, and therefore should not be used as such. Safety glasses provide protection from solid projectile impact, as well as from small, incidental liquid splashes. The model available in the campus bookstore is designed to fit over prescription glasses, or used without glasses.
- 2. Chemical Splash Goggles:** the model carried in the campus bookstore (available Fall 2015) are also designed to fit over prescription glasses. Splash goggles provide a greater degree of protection from large splashes than safety glasses, and also provide impact protection.

To determine⁴ which of the above are appropriate for your teaching laboratory, please answer the following three questions:

1. Will students be handling hazardous chemicals¹ in quantities greater than 1 liter or 500 grams, or handling any amount of hazardous chemicals in situations that present splash hazards²? **YES/NO**
2. Will students be handling potentially explosive compounds³ in any quantity? **YES/NO**
3. Will students be handling cryogenic or hot liquids? **YES/NO**

If you answer **YES** to any of the above questions, students must wear chemical splash goggles when executing that operation.

¹ **Hazardous Chemicals** and liquids include reactives, flammables, oxidizers, corrosives, sensitizers, toxic substances and carcinogens,

² **Splash Hazards** include any operation in which material can reasonably be expected to be ejected from a system into the surrounding area/atmosphere. This can include ejection via mechanical means (spilling during large volume transfer, vigorous stirring, bubbling gas through a liquid, grinding, etc.) and thermal means (bumping/boiling over, thermal volume expansion, etc.)

³ **Potentially Explosive Compounds (PECs)** are chemicals that may cause a sudden release of energy and heat when subjected to sudden shock, pressure or high temperature. This includes chemicals that are stable when purchased, but may degrade and destabilize over time (e.g. ethers). GHS hazard codes to look for on the SDS (MSDS): H240, H241, H271.

⁴ Some teaching lab coordinators may have already successfully used the online “LHAT” application to determine the PPE needs for their courses. If so, the above questions do not need to be addressed.