









Safety and Safety Equipment in the Lab

Safety equipment	Its picture	Its function
Chemical splash goggles		It is used to protect your eyes from the impact of flying particles.
Face shield		It is used to protect wearer's entire face from flying objects and chemical splashes.
Lab coat		It is used to protect your regular clothing from dirt, and it prevents the spreading contamination from lab to home.
Lab apron		It is worn over clothes to protect you from chemicals and to dry your hands when finishing the experiment.
Gloves		They are used to exclude any incidental accidents from hazardous materials and containers. They are of different kinds and the most one used in chemistry labs are labeled Norfoil .
First-aid kits		It carries emergency medicines in case explosions or lab injuries occur.

Deluge Safety Showers		It provides on-the-spot decontamination. It allows to flush away hazardous substances that can cause injury, and to extinguish fire on an individual or on clothes.
Fire extinguisher		It is used put out or control small fires usually in emergency situations.

Some important guidelines in the lab

- **Lab coats** or **disposable aprons** should be worn in the lab to protect you and your clothing from contamination. Lab coats should not be worn outside the laboratory.
- **Lab footwear *should*** consist of normal closed shoes to protect all areas of the foot from possible puncture from sharp objects and/or broken glass and from contamination from corrosive reagents and/or infectious materials.
 - It is of great importance to consider ones behaviour « **Have the right attitude** » in labs so that your safety and the safety of others are guaranteed. The following are examples to avoid certain circumstances:
 - Wear the correct gloves when needed.
 - Wash hands once gloves have been removed.
 - Disposable gloves must be discarded once removed. Do not save for future use.
 - Non-disposable/reusable gloves must be washed and dried, as needed, and then inspected for tears and holes prior to reuse.
 - Remove gloves before touching personal items, such as phones, computers, pens and one's skin.
 - If for any reason a glove fails, and chemicals come into contact with skin, consider it an exposure and seek medical attention.

Other safety protocols when using lab

Know where running water is located. If acid gets on your eyes or skin, you'll need to **Wash it off immediately** with cool, running water for 15–20 minutes .

Tie up long hair before handling the acid. To avoid burning hair tie the hair back.

Watch out for sources of heat. All well-equipped chemistry labs have sources of heat like a Bunsen burner , This **heat source** is often the source of accidents in the lab

Avoid breaking glassware. Glass tubing is a frequent cause of lab accidents, as it can snap into sharp pieces if you forget to lubricate it before sealing it with a stopper.

Never eat or drink in the lab. you **must** not prepare food in the lab or store it there. Even if you are careful to keep the food away from contact with chemicals, your food may still become contaminated with chemical fumes.

Put everything back where you found it. When you finish a lab, you **should** leave it how you found it. That means replacing everything where it belongs .

Taken from

<http://www.ehs.ufl.edu/programs/lab/chp/gloves/>