



# Chemicals

These chemical safety tips provide a basic set of guidelines for the safe use and management of hazardous materials in laboratories, workshops or studios. These safety tips should be supplemented with Standard Operating Procedures (SOP), available on the Laboratory Safety page on the EHS website. Follow these tips to help keep you and others safe.

## Ongoing lab maintenance

- Ensure fume hoods are always used when there is an inhalation risk to a toxic chemical.
- Check that fume hoods are in good working order by verifying the certification sticker on the hood, which indicates that the hood has passed inspection. Inspections are valid for one year. Follow standard operating procedures outlined in TMU-LAB-013: Fume Hood Operation.
- Emergency eyewash and safety showers should be available in areas where hazardous materials are used (e.g. chemicals, sand, biohazards, etc.).
  - In the event of an incident where chemicals come in contact with eyes or skin, use these units to flush the affected area for a minimum of 15 minutes.
- Emergency eyewashes and showers should be checked weekly. Follow the standard operating procedures outlined in TMU-LAB-016: Emergency Eyewash and Safety Shower and use the Emergency Eyewash and Shower Weekly Inspection Checklist and Log to document your test.

## Receiving, storing and working with chemicals

- All chemicals must be received through TMU Shipping and Receiving so that they can be barcoded into TMU's chemical inventory system, Vertére. To create an account for Vertére, follow the instructions on the Chemical Safety page on the EHS website.
- Adhere to proper storage practices for hazardous materials, especially corrosive, flammable and combustible chemicals. Best practices for chemical storage can be found in the Laboratory Safety Manual on the Laboratory Safety page of the EHS website.
- When stored over time, high risk chemicals pose additional risks by becoming unstable. Ensure these are disposed of prior to their expiry date and/or stored under conditions set out in their related Safety data Sheets (SDSs). For example, picric acid and peroxide forming compounds.
- When using hazardous materials, always ensure that the proper personal protective equipment (PPE) is used. For required PPE to handle chemicals, refer to the SDSs. Guidelines on selection, use and maintenance can be found in our Personal Protective Equipment Manual on the Personal Protective Equipment page on the EHS website.

## Disposing of chemicals and managing emergencies and spills

- **Do not** dispose of any hazardous materials, including chemicals, down the drain or in the regular garbage. Follow the proper hazardous waste procedures as outlined on the Chemical Safety page.
- In case of emergencies or spills of hazardous materials, refer to SDSs and follow the proper emergency response and spill procedures outlined in the Laboratory Safety Manual.

### Additional chemical and laboratory safety resources

Visit [torontomu.ca/ehs/laboratory-safety](http://torontomu.ca/ehs/laboratory-safety) for more information, including roles, responsibilities and requirements to assist workers who may be exposed to a range of chemical and physical hazards.

Visit [cchohs.ca/oshanswers/chemicals](http://cchohs.ca/oshanswers/chemicals) for more resources from the Canadian Centre for Occupational Health and Safety.

