

MERCURY

Hazard Description

Mercury is a silver liquid metal that can vapourize at temperatures as low as -12°C . Mercury vapour is colourless, odourless, and may be toxic if inhaled. Short-term exposure to mercury vapours provides little hazard except at very high levels, while long-term exposure can lead to fatigue, anorexia, weight loss, inflammation of gums, and tremors.

Mercury Thermometers

Mercury thermometers are banned at the University. Follow these steps if your lab has mercury thermometers:

1. Bag them tightly
2. Seal the bag
3. Transport them to the waste facility during your normal waste drop-off

Contact esf@uwaterloo.ca if you have any questions.

Mercury-containing equipment

Equipment that contains mercury should be placed in a secondary containment/tray, if possible, to contain any potential spills. If not possible, contact the Safety Office to develop a spill plan, in advance.

If your lab plans to use elemental mercury outside of mercury-containing equipment, contact esf@uwaterloo.ca for advice prior to use.

Mercury Spills

If you have a mercury spill, the mercury itself is not an emergency.

1. Close off the area
2. Put a sign on the door
3. Call the spills team via the Special Constables Service during regular office hours for help cleaning the spill

Handling

Mercury is typically not handled outside a spill situation as it is often stored inside of thermometers, flasks, or vials. If you will be handling mercury, complete an SOP with handling-specific procedures.

Emergency Procedures

Always review SDS of the purchased product for manufacture-specific recommendations. Look at SDS for other modes of exposure.

Contacts

Emergency: 911

UW Special Constables: 519-888-4911 or ext. 22222

Poison Control: 1-800-268-9017

Whenever 911 is called, if possible, UW Special Constables should also be informed to make them aware of the emergency on campus and allow them to support as needed. Ask them to meet the paramedics and direct them to the incident location.

Inhalation	<ul style="list-style-type: none">Remove individual from the contaminated areaCall 911 for transport to the hospitalPerform CPR and artificial respiration if necessary. Do not give mouth-to-mouth without the aid of a pocket mask to avoid ingestion of mercury.
Skin Contact	<ul style="list-style-type: none">Call 911 for transport to the hospitalRemove contaminated clothing and quickly but gently wipe material off skinFlush with water
Eye Contact	<ul style="list-style-type: none">Call 911 for transport to the hospitalFlush eyes using an eyewash station for a minimum of 15 minutes

Storage

Storage Group G – Compatible with Anything

Hazardous Waste (Only Specialized Information)

- Must be disposed of through the ESF as per the [University's Hazardous Waste Standard](#).
- Mercury waste must be segregated from all other materials.
- In case of a spill, elemental mercury should be contained in a bottle or sealed container. Any other materials, gloves, broken glass, etc. should be put in a bag in the spill kit.
- Mercury thermometers should be placed in a heavy-duty, plastic, 6 mil bag, then taped shut. These may be brought down to ESF, during a regular waste appointment.