



Hazardous Waste Disposal

EMPTY CHEMICAL CONTAINERS

Disposal of empty containers depends on the container and contaminant. Most containers can be re-used by the lab itself, Health, Safety & Environment, or can be safely recycled or disposed of. Outlined below are the disposal procedures for decontaminated empty **glass** solvent containers, empty **glass** corrosives containers, empty **plastic** containers, and for empty *contaminated* containers.

HOW TO DISPOSE – EMPTY SOLVENT CONTAINERS (GLASS)

Examples: methanol, ethanol, acetone, dichloromethane, chloroform, ethyl acetate, ethyl ether, hexanes

- Allow solvent residue to evaporate out in a fume hood for at least **24 hours or more**
- If water soluble, **triple rinse** containers and lids with water (decontaminate lid as well)
 - In some cases, rinsate may require chemical disposal
- **Deface all labels and hazard warnings**
- Attach lid loosely
- Request pick-up through the Hazardous Waste Inventory System (HWIS) as “Other Wastes”. Bottles will be re-used in the hazardous waste system.

HOW TO DISPOSE – EMPTY CORROSIVES CONTAINERS (GLASS)

Examples: hydrochloric acid, sulfuric acid, phosphoric acid, nitric acid, acetic acid, ammonium hydroxide, sodium hydroxide, potassium hydroxide

- Triple rinse containers and lids with water and dispose of the rinse as waste according to pH
 - pH between 6-8 – rinse water can be disposed of in the sewer
 - pH below 6 or above 8 – dispose of rinse water as chemical waste through the Hazardous Waste Inventory System
- **Deface all labels and hazard warnings**
- Attach lid loosely (decontaminate lid as well)
- Request pick-up through the Hazardous Waste Inventory System (HWIS) as “Other Wastes”. Bottles will be re-used in the hazardous waste system.

HOW TO DISPOSE – EMPTY SALT CONTAINERS (GLASS)

Examples: potassium chloride, magnesium chloride, etc.

- Triple rinse containers and lids with water
- Attach lid loosely
- **Deface all labels and hazard warnings**
- If the salt was non-hazardous (see SDS), recycle through the clean glass system, or
- Request pick-up through the Hazardous Waste Inventory System (HWIS) as “Other Wastes”. Bottles will be re-used in the hazardous waste system.



HOW TO DISPOSE – EMPTY CONTAINERS (PLASTIC)

- Decontaminate the container (and lid) as outlined above for solvents, corrosives and salts
- Attach lid loosely
- **Deface all labels and hazard warnings**
- If applicable, recycle through the lab plastics recycling program (<https://sustain.ok.ubc.ca/initiatives/labplastics/>), or
- Request pick-up through the Hazardous Waste Inventory System (HWIS) as “Other Wastes”.

HOW TO DISPOSE – EMPTY CONTAINERS (METAL)

- Metal containers should never be reused
- If they are uncontaminated (ie. used as a secondary container, or held non-hazardous chemical), they can be sent for recycling under the lab plastics recycling program (<https://sustain.ok.ubc.ca/initiatives/labplastics/>)
- If contaminated, dispose of as a chemically contaminated solid waste, or request pick-up through the Hazardous Waste Inventory System (HWIS) as “Other Wastes”.
- Attach lid loosely
- **Deface all labels and hazard warnings**

HOW TO DISPOSE – EMPTY CONTAMINATED CONTAINERS

Containers which cannot be decontaminated

- Follow procedures for chemically contaminated glass or solids
- Request pick-up through the Hazardous Waste Inventory System (HWIS) as “Other Wastes”.

INFOGRAPHICS

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Procedure for empty chemical containers

This is a guide to help you determine how to safely dispose of your hazardous waste. If you have questions, contact HSE.

1 What is it?

Containers that once contained chemical (liquid or solid). Disposal depends on the container and the contaminant. Most containers can be re-used, or can be safely recycled or disposed of once decontaminated

For containers that cannot be decontaminated follow appropriate 'contaminated' procedures



2 Solvent Containers

1. Allow solvent residue to **air out** in fume hood for 24–48 hours
2. If water soluble, **triple rinse** bottle and lid and dispose of rinsate (in some cases rinsate may require chemical disposal)
3. Glass must be visually **clean**
4. **Deface all labels**, attach lid loosely
5. Submit for pick-up as "Other wastes" through the HWIS for re-use or disposal



methanol, ethanol, dichloromethane, chloroform, ethyl acetate, ethyl ether, hexanes

3 Corrosives containers

- **Triple** rinse bottle and lid and dispose of rinsate as waste according to pH:
 - pH 6–8: dispose down drain
 - pH <6 or >8: dispose as chemical waste through the HWIS.
- **Deface all labels**
- Submit for pick-up as "Other wastes" through the HWIS for re-use or disposal

hydrochloric acid, sulfuric acid, phosphoric acid, nitric acid, acetic acid, ammonium hydroxide, sodium hydroxide, potassium hydroxide



4 Salt containers

- **Triple** rinse with water (decontaminate lid as well)
- Attach lid loosely
- **Deface all labels**
- If applicable, recycle through the [lab recycling program](#) or
- Submit for pick-up as "Other wastes" through the HWIS for re-use or disposal



potassium chloride, magnesium chloride, etc

5 Metal containers

- **Metal containers should never be re-used**
- If they are uncontaminated they can be sent for recycling under the [lab plastics program](#)
- If they are contaminated, submit for pick-up as "Other wastes" through the HWIS
- Attach lid loosely
- **Deface all labels**



uncontaminated: used as secondary container, or held non-hazardous chemicals



contaminated: contained hazardous chemical such as ethanol, acetone, etc

6 What happens after pick-up?

- After pick-up, HSE **consolidates** the clean glass and plastic containers.
- The containers are then re-used in the hazardous waste system by other labs
 - to prevent undue harm to HSE and others, you must decontaminate and segregate your wastes properly. If you cannot decontaminate your waste, follow procedures for contaminated glass or solids, or submit as "Other Wastes" in the HWIS



Still have questions?

Contact Health, Safety and Environment



hse.ok@ubc.ca

