

# Labelling Lab Reagents & Samples

This is an overview of how to label reagents, chemicals and samples in your lab. Everyone must complete WHMIS training and all applicable training for science safety before working in any lab with hazardous chemicals



**Supplier label:** The label that is on the chemical when you purchase it. This label must remain on the bottle.

- If it becomes damaged or illegible, you must create and attach a workplace label with the same or updated information to identify the contents.

You must label every chemical or reagent you make or use in the lab with a workplace label. Refer to the SDS for required information.



**Workplace label:** this is made by, and for use in the lab that transfers a chemical from its original container into another container or prepares a hazardous lab reagent.

A workplace label must contain all of the following information;

- 1) The name of the chemical (product identifier). Using only a chemical formula is not acceptable.
- 2) Safe handling precautions. The precautions can be conveyed using pictures, words, pictograms.
- 3) Refer to the safety data sheet (SDS) if one exists.




**There are 2 exceptions where a workplace label is not required:**

- 1) If all the hazardous products will be used immediately and completely, or,
- 2) If all the following conditions are met:
  - a) the hazardous product is used only by the worker who filled the container,
  - b) the hazardous product is used only during the shift in which the portable container was filled and,
  - c) the contents of the container are clearly identified.

Three examples of acceptable workplace labels.

Labels can be printed on an adhesive label or legibly written on lab tape

<p><b>Acetone</b> PPE: gloves, eye protection, lab coat. Ensure adequate ventilation. Highly flammable liquid &amp; vapour. May cause eye irritation. Keep away from flame. See SDS</p>	<p><b>Acetone</b></p>  <p>Ensure adequate ventilation. Highly flammable liquid &amp; vapour. May cause serious eye irritation. Keep away from flame. Refer to Safety Data Sheet</p>	<p><b>Acetone</b> Wear a lab coat, eye protection and gloves. Ensure adequate ventilation. Highly flammable liquid &amp; vapour. May cause eye irritation, Keep away from flame. Refer to SDS</p>
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## Samples in the lab & storage in shared spaces (walk-in fridge/freezers)

You must ensure that every sample you make is labelled to ensure everyone is aware of the contents.



- If a sample less than 100 mL is to remain in the laboratory where it was produced and in the control of the worker who produced it, it only requires the name of the chemical (product identifier) on each container.
- If you store a sample outside of the lab e.g., shared walk-in cold storage, the samples must have **workplace labels**. Due to the size limitations of some containers e.g., 1.8 mL tube, you can label the outer packaging with the information needed on a workplace label. Each individual container must still list chemical (product identifier).
- Always ensure everyone can determine what is contained in your samples
- Ensure the workplace label is securely affixed to the outer container
- **In addition to sample contents, the outer packaging labelling must also include information identifying you + your supervisor + date + contact information**

- Remember that your samples do not cease to exist when you leave the university. Don't leave them for someone else to clean up.
- Consult with your supervisor to determine if you can dispose of them. If they must be retained, ensure anyone after you knows what is inside each container!
- **Examples of poor sample labelling** include instances of soil digests not indicating they contained 20% hydrochloric acid, liquids that contained low level mercury, tissue samples in tubes with formaldehyde or sample tubes with diluted pesticides.

**Not labelling your samples creates risks for anyone in your lab, shared spaces or anyone dealing with spills, leaks etc.**

The images below are some commonly used WHMIS pictograms

<https://www.ccohs.ca/WHMISpictograms.html>

- You can print the required pictograms on your lab printer or,
- Labels with these images are available for a nominal fee from Science Stores (Science Complex SC 133)



Corrosion  
Corrosives



Environment  
Aquatic Hazards



Exclamation Mark  
Irritants/Sensitizers/Other Hazards



Flame  
Flammables



Flame Over Circle  
Oxidizers



Health Hazard  
Specific Toxicity Hazards



Skull and Crossbones  
Acute Toxicity

**R.R.O. 1990, Reg. 860 requires the use of workplace labels as described above.**