

Department of Risk Management Services

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Safety Data Sheets and Pathogen Safety Data Sheets

1. SCOPE

This guideline provides directions for Regulatory and Best Practices for the use of Safety Data Sheets and Pathogen Safety Data Sheets (SDS and PSDS). It applies to all UBC employees working with chemicals and/or pathogens.

2. PURPOSE

Safety Data Sheets (SDSs) and Pathogen Safety Data Sheets (PSDSs) are essential components in ensuring occupational health and safety within potentially hazardous environments.

3. BACKGROUND

Under the new Workplace Hazardous Materials Information System (WHMIS 2015) the formerly known Material Safety Data Sheet (MSDS) became the Safety Data Sheet. The change is happening in several phases. After December 1, 2018, WHMIS 2015 will be the only system in use. Until then, employers are allowed in the workplace both MSDSs and SDSs.

Important information regarding chemical, physiochemical, hazard/toxicity, required personal protective equipment, etc. are found on the SDS. In particular, WHMIS-related information will be found on the label of the agent of concern, with additional and more comprehensive information detailed in the SDS. Accordingly, the SDS for any new chemical, chemical mixture, or unknown agent should be fully reviewed prior to working with it. It is also important to note that suppliers are required to provide a SDS for each reagent (may be restricted to first time ordering).

Similarly, Pathogen Safety Data Sheets (PSDSs) provide critical information regarding infectious materials, including the mode of transmission, disease symptoms, decontamination methods, PPE, and containment requirements. These are provided by the <u>Public Health Agency of Canada</u>, and are not available for all infectious materials.





RESPONSIBILITY

Supervisor

- Make SDS and/or PSDS available to workers who may be exposed to the hazardous compound
- Ensure that students/staff understand how to read the SDS and PSDS
- Ensure that students/staff know the location of the SDSs and PSDSs

Student / Staff

- Consult SDS and/or PSDS before working with a hazardous compound and follow the instructions for safe handling
- When necessary, request additional information or clarifications from supervisor or contact a Risk Management Services advisor at 604 822 2029

5. **REFERENCES AND DEFINITIONS**

Infectious Material

Infectious agents or part thereof, presenting a real or potential risk to the wellbeing of Humans, Animals, or Plants either directly or indirectly through the disruption of the environment. This term is often used interchangeably with: biohazardous, infectious agent, hazardous biological material, and pathogenic.

See the <u>UBC Biological Safety Training Manual</u> and the UBC Chemical Safety Training Manual for more information.

6. TRAINING REQUIRED

Prior to working with chemicals and infectious agents, every worker must be appropriately trained. The following courses are offered by Risk Management Services:

- Biosafety Training mandatory for all persons working with Risk Group 1-3 biohazards
- Chemical Safety Training mandatory for all laboratory persons handling hazardous chemicals
- WHMIS Training mandatory for all workers who work with a hazardous product or may be exposed to a hazardous product in the course of their work activities

The requirements for the various UBC groups are as follow:

- Non-laboratory staff/students: <u>WHMIS Course</u>
- Laboratory staff/students: <u>Chemical Safety Course</u>, <u>Biological Safety Course</u>



• Undergraduate students: Introduction to Biosafety Course, as part of an Undergraduate Teaching Lab.

After the training takes place, the training must be documented in accordance to WorkSafe BC, CFIA and PHAC regulations.

7. PROCEDURE

7.1. Access to MSDS and PSDS

- SDS when ordering chemicals, the supplier is required to provide an MSDS with the shipment. This is a good source for obtaining up-to-date MSDS. If the MSDS is not with the package then it may be obtained via download on the supplier's website. Additionally, UBC has an account with the Canadian Centre for Occupational Health and Safety: http://ccinfoweb.ccohs.ca/msds/search.html
- PSDS the Public Health Agency of Canada has developed these information sheets for certain risk group 2-4 pathogens. If they are available for the organism being used in the laboratory, then a copy of the PSDS needs to be available to the personnel. All the available PSDSs are available at: <u>http://www.phac-aspc.gc.ca/lab-bio/res/psds-ftss/index-eng.php</u>

7.2. Reading an SDS and PSDS

- **SDS** Workplace Hazardous Materials Information System (WHMIS) and the new Global Harmonization System (GHS) define the sections required in an MSDS. In general these sections include, but are not limited, to: physical data, fire/explosion hazard, reactive data, toxicological properties, preventative measures, and first-aid.
- **PSDS** Public Health Agency of Canada has defined the sections of a PSDS. In general these sections include, but are not limited to: characteristics, pathogenicity, host range, infectious dose, stability, first aid, and containment requirements.

7.3. Location of SDS and PSDS

• **SDS** – These may be stored on-site in either electronic or paper versions. If there is an accurate chemical inventory in place then paper versions of the SDS sheets are not required. But individuals must have access to the internet if paper copies are not available.

Recommendation – that paper copies of the SDSs for highly hazardous chemicals still be kept on-site. One copy available near where the chemical is stored; and another that is accessible outside of containment.



• **PSDS** – These too may be stored on-site in either electronic or paper versions. Ideally they would be incorporated into the Biosafety Permit Application, but if not there, then in a safety folder/binder.

8. **REVIEW AND RETENTION**

This guideline is reviewed annually or whenever deemed necessary by the responsible departmental representative in Risk Management Services.

9. DOCUMENT INFORMATION

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