Guideline	UBCV-RMS-OHS-GDL 14-001
Department of Risk Management Services www.rms.ubc.ca	Effective date: January 2, 2014 Review date: January 2, 2014 Supersedes: N/A

Material and Pathogen Safety Data Sheets

1. SCOPE

This standard operating procedure (SOP) provides directions for Regulatory and Best Practices for the use of Material and Pathogen Safety Data Sheets (MSDS and PSDS).

2. RESPONSIBILITY

Prior to working with chemicals and infectious agents, every worker must be appropriately trained. It is the responsibility of the supervisor to ensure that workers:

- Have access to any available MSDS and PSDS
- Understand how to read the MSDS and PSDS
- Know where the MSDS and PSDS are located

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

3. BACKGROUND

Material safety data sheets (MSDSs) are essential components in ensuring occupational health and safety within potentially hazardous environments. Important information regarding chemical, physiochemical, hazard/toxicity, required personal protective equipment, etc. are found on the MSDS. 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 MSDS. Accordingly, the MSDS 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 MSDS 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 Public Health Agency of Canada, and are not available for all infectious materials.

4. 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 UBC Biological Safety Training Manual and the UBC Chemical Safety Training Manual for more information.

5. PROCEDURE

5.1. Access to MSDS and PSDS

- **MSDS** – 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: http://www.phac-aspc.gc.ca/lab-bio/res/psds-ftss/index-eng.php

5.2. Reading an MSDS and PSDS

- **MSDS** – 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.
- **MSDS** – all individuals handling chemicals must take a WHMIS course.
  - Non- laboratory staff/students: WHMIS Course
  - Laboratory staff/students: Chemical Laboratory Safety
- **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.

- **PSDS** – all individuals handling risk group 1-3 biohazards must take the UBC biosafety course. Biological Laboratory Safety
  - Undergraduate students: Introduction to Biosafety Course, as part of an Undergraduate Teaching Lab.
  - Laboratory staff/students: Biological Laboratory Safety Course

5.3. Location of MSDS and PSDS

- **MSDS** – 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 MSDS sheets are not required. But individuals must have access to the internet if paper copies are not available. Remember that all MSDS must not be older than 3years to be compliant with WHMIS and WorkSafe BC.

Recommendation – that paper copies of the MSDSs 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.

6. REVIEW AND RETENTION

This SOP is reviewed annually or whenever deemed necessary by the responsible departmental representative, the Occupational and Research Safety Group within Risk Management Services.