# BI Substances Policy

1. This policy pertains to all hazardous and biohazardous materials brought into or stored in BI laboratories.
2. Individuals that handle hazardous materials should be trained in the safe handling, separation, storage, and disposal procedures for the specific hazardous materials, as per RMM #501: Hazardous Materials Management Systems Including WHMIS Program.
3. Designated substances must be identified and accompanied by a written risk assessment, which must be approved by the health and safety authorities. Refer to RMM #500: Designated Substances Control Program.
4. Transportation of Dangerous Goods should be in accordance with RMM #505: Transportation of Dangerous Goods.
5. Individuals that handle biohazardous materials should be trained in the safe handling, separation, storage, and disposal procedures for the specific biohazardous materials, as per RMM #600: Biosafety Program.
6. Any unauthorized or non-inventoried substances found in the BI laboratory will be disposed of or destroyed appropriately, with financial responsibility falling to the users and their respective supervisor.
7. BI Users must comply with McMaster’s HECHMET inventory system in BI laboratories. Refer to EOHSS for more information and consult BI staff as needed.

## Substance Labelling

1. Hazardous materials will be labelled in accordance with WHMIS 2015 standards to include supplier and secondary container labels. Labels are available from BI staff and EOHSS. Secondary container labels must also the date and owner name. If applicable, include the BI identifier number on the label.
2. Biohazardous materials require the name, date, substance name and biosafety level designation. Refer to the BI Biohazard Work Policy.
3. Labels on containers containing substances should not be removed or defaced, unless the container is empty, cleaned, and ready for disposal.

## Substance Handling & Transportation

1. Refer to the respective SDS/PSDS and risk assessments prior to handling any substance. Biological agents must be handled according to the containment levels associated with its biosafety level. Refer to the BI Biohazard Work Policy.
2. Users may only use and/or handle substances for which they are authorized.
3. Users should inspect substance containers prior to handling, to ensure the substance is not expired, unstable (e.g. peroxide former) or leaking.
4. Users should use the appropriate engineered system(s) when handling or transporting substances, to avoid exposure. Movement and/or transportation of biological materials should be performed using a labelled, leak-proof, and impact-resistant container; refer to the BI Biohazard Work Policy.

## Substance Inventory

1. All hazardous materials must be barcoded in the McMaster Hechmet system (https://hr.mcmaster.ca/employees/health\_safety\_well-being/our-safety/lab-safety/mcmaster-chemical-inventory-system/).
2. All biohazardous materials must be captured on a McMaster Biological Utilization Protocol (BUP; https://biosafety.mcmaster.ca/biosafety\_bup.htm).
3. When using or removing a substance, ensure to update relevant inventories.

## Substances Storage

1. Substances must be stored in cool, dry, well ventilated areas, away from offices and emergency exits, and not in fume hoods.
2. Substance containers should be properly maintained, in good condition and properly labeled.
3. Stored hazardous materials should be separated according to compatibility (oxidizer, water reactive, flammables, acids, caustics/bases). Incompatible chemicals must be stored away from each other. Refer to the McMaster Laboratory Handbook.
4. Unopened peroxide formers, without inhibitors, should only be kept for one year.
5. Opened ethers (peroxide former) should be kept no longer than 6 months.
6. Biohazardous materials will be stored according to the appropriate containment level in designated storage areas. Biological storage areas will be labeled as biohazardous, with the applicable containment level and emergency contact information. Refer to the BI Biohazard Work Policy.
7. Access to CL-2 materials will be restricted and only accessible by authorized personnel. Refer to the BI Biosecurity Policy.

## Substance Documentation

1. SDS/PSDS may be electronic or printed and kept in BI laboratory area near where the substance is stored.
2. Update SDS/PSDS as new information is available.

## Substance Removal

1. When removing a substance, ensure to update relevant inventories.
2. Refer to the BI Waste Policies for disposal guidelines.
3. Refer to the BI Emergency Policies for spill procedures.