

Policy

Policy Title: Chemical Storage and Handling	Document No: 10370
Department: Safety	Revision No. 00
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1. Purpose

1.1. The purpose is to set policy and provide guidance regarding safe storage and handling chemicals.

2. Scope

2.1. Applies to all hazardous chemicals stored or handled by workers employed or contracted by Conviron.

3. References

- **3.1.** Workplace Health and Safety Regulation 217/2006, Part 36
- **3.2.** OSHA 29 CFR 1910.106 Flammable Liquids
- **3.3.** Fire Safety and Emergency Response Plan, 10075.
- **3.4.** Chemical Inventory Procedure, 10172.

4. Definitions

- **4.1.** WHMIS: Workplace Hazardous Materials Information System. A Canada wide information system that deals specifically with safe management and use of hazardous materials legislated by both Federal and provincial government.
- **4.2.** <u>MSDS</u>: Material Safety Data Sheet. A document required under WHMIS regulation containing specific data about hazardous material properties and safe handling procedures.
- **4.3.** <u>Hazardous Products</u>: Products regulated by WHMIS.
- 4.4. NFC: National Fire Code of Canada
- **4.5.** Storage Area: Any room or space where chemicals are stored.



4.6. Eye level: At the eye level of the shortest person accessing the hazardous material from tools or equipment that cut, grind or punch.

5. Policy

5.1. Responsibilities

- **5.1.1.** Employer:
 - **5.1.1.1.** Ensure that equipment, materials and protective devices are maintained in good condition;
 - **5.1.1.2.** Provide training in WHMIS, use, and waste handling.
- **5.1.2.** Supervisor:
 - **5.1.2.1.** Ensure that workers comply with the act and use protective devices as required.
 - **5.1.2.2.** Ensure that workers use or wear protective equipment, clothing or devices.
 - **5.1.2.3.** Advise the worker of any actual or potential danger to which that worker may be exposed.
 - **5.1.2.4.** Provide written instructions including the measures and procedures for protection of health and safety.
 - **5.1.2.5.** Take every reasonable precaution to protect the worker.

5.1.3. Worker:

- **5.1.3.1.** Work in compliance with the Act and Regulations;
- **5.1.3.2.** Wear all protective equipment, devices or clothing that is required by the employer.
- **5.1.3.3.** Report any defects in the in protective devices, that may endanger a worker or another worker.
- **5.1.3.4.** Not remove or alter any protective devices.
- **5.1.3.5.** Not operate or use any equipment in a manner that endangers him or herself or others.

5.2. Chemical Handling

5.2.1. Know the physical and health hazards associated with the chemicals you



are using.

- **5.2.2.** Carefully read the chemical's label and Material Safety Data Sheet (MSDS) before using a chemical for the first time and be familiar with it at all times.
- **5.2.3.** Review the appropriate handling procedures. These documents will provide any special handling information.
- **5.2.4.** Keep the following guidelines in mind when handling chemicals:
 - **5.2.4.1.** Do not work alone with chemicals. See Working Alone policy 10363.
 - **5.2.4.2.** Use required personal protective equipment as indicated by the MSDS. See PPE policy 10210. Eye protection is always required.
 - **5.2.4.3.** Label all containers with chemical content.
 - **5.2.4.4.** Keep chemicals off your hands, face and clothing, including shoes. Avoid direct contact with any chemical.
 - **5.2.4.5.** Never smell, intentionally inhale or taste a chemical.
 - **5.2.4.6.** Smoking, drinking, eating and the application of cosmetics is forbidden in areas where hazardous chemicals are used or stored.
 - **5.2.4.7.** Keep your hands and face clean. Wash thoroughly with soap and water after handling any chemical and especially before eating.
 - **5.2.4.8.** Always use chemicals with adequate ventilation or in a chemical fume hood. Refer to the MSDS and Risk Assessment and procedures to determine what type of ventilation is needed.
 - **5.2.4.9.** Use hazardous chemicals only as directed and for their intended purpose.
 - **5.2.4.10.** Inspect equipment or apparatus for damage before adding a hazardous chemical. Do not use damaged equipment.
 - **5.2.4.11.** Never use mouth suction to fill a pipette, etc.
 - **5.2.4.12.** Before transferring or dispensing a flammable liquid from one container to another, electrically ground containers using approved methods.

5.3. Waste

5.3.1. Chemical waste is only disposed of in accordance with local regulations.



5.4. Storage Areas

- **5.4.1.** Storage areas are secured when not in use.
- **5.4.2.** Storage areas are well illuminated.
- **5.4.3.** Open flames, smoking and localized heating units are not permitted near storage areas.
- **5.4.4.** Do not mix chemicals on surfaces used for storage.
- **5.4.5.** Aisles surrounding storage areas are free from obstruction and other tripping hazards.
- **5.4.6.** Open flames, smoking and localized heating units are not permitted near storage areas.

5.5. Shelf Storage

- **5.5.1.** Large or heavy containers are stored on shelves no higher than waist level.
- **5.5.2.** Containers of chemicals are stored at or below eye level.
- **5.5.3.** Enough storage space is allotted, ensuring that shelves are not crowded.
- **5.5.4.** Empty containers are removed from the shelves and dispose of appropriately.
- **5.5.5.** Shelves and benches are level and stable. Shelving units are securely fastened to the wall.
- **5.5.6.** The weight limit of the shelves is not exceeded.
- **5.5.7.** Shelves are clean, free from chemical contamination.

5.6. Labelling of Chemical Containers

- **5.6.1.** All containers are properly labelled with appropriate WHMIS supplier labels or workplace labels.
- **5.6.2.** All labels are readable and free from encrustation.
- **5.6.3.** Labels are firmly attached to the containers.

5.7. Guidelines

5.7.1. Chemicals are not exposed to direct sunlight or localized heat.



- **5.7.2.** Incompatible chemicals are physically separated from each other. (See MSDS Sheets)
- **5.7.3.** MSDS for each chemical must be consulted for proper storage instructions and should be accessible to the storage area.
- **5.7.4.** New chemicals shall be segregated from waste chemicals.
- **5.7.5.** Shelves and benches are level and stable. Shelving units are securely fastened to the wall.

5.8. General Storage Information

- **5.8.1.** Chemicals are not exposed to direct sunlight or localized heat.
- **5.8.2.** Incompatible chemicals are physically separated from each other.

5.9. Flammables

- **5.9.1.** All flammable liquids are stored in a NFC approved flammable liquid cabinet.
- **5.9.2.** All flammable liquids are kept in a flammable cabinet, except for quantities required in one day's work.
- **5.9.3.** Containers used for the storage of flammable or combustible liquids shall be of not more than 5 L capacity
- **5.9.4.** Flammable liquids are to be kept away from any open flames or other sources of ignition
- **5.9.5.** Smoking is prohibited in areas where flammable substances are used and stored.

6. Revision History

Revision Number	Notes
00	New Procedure

7. Attachments

N/A