

What is WHMIS?



WHMIS stands for the Workplace Hazardous Materials Information System. It is a national hazardous materials classification system designed to provide workplace standards for the control, handling, storage, and disposal of 'controlled' products. Controlled products are hazardous materials that can impact the health and safety of the workplace and its employees. A list of hazardous products can be found under the Hazardous Products Act. Consumer Products fall under different legislation and are not controlled by WHMIS. WHMIS consists of three main parts: labels, Material Safety Data Sheets (MSDS), and worker education and training.

WHMIS Program

A WHMIS program is required in all workplaces that may have controlled products. Employers must provide workers with information regarding health and safety hazards in their workplaces. Employees have the right to know of potential dangers that can affect their work and health.

Laws Affecting WHMIS

WHMIS standards are coordinated between both levels of government: federal, and provincial or territorial. Supplier labeling and MSDS requirements fall under the federal Hazardous Products Act. Several regulations are covered under this Act, including:

1. Controlled Products Regulation

- Defines what a controlled product is and what information goes onto a supplier label and the MSDS

2. Ingredient Disclosure List

- Hazardous ingredients must be disclosed on an MSDS
- Disclosure regulations regarding business information and MSDS labeling also fall under the federal government

The Hazardous Materials Information Review Act provides legislation that covers issues regarding confidential business information (e.g., Proprietary ingredients), and their disclosure. Regulations under this Act include:

1. Creation of Information Review Commission

- Rules and exemptions regarding confidential business information disclosure
- Defines what information suppliers/employers can withhold from labels/MSDSs

2. Hazardous Material Information Review Regulations

- Criteria for determining claims for exemption, fees for filing claims, and appeals

Each province and territory establishes WHMIS employer requirements within its own jurisdiction. In Ontario, these requirements are set out in the WHMIS Regulation 860, which falls under the Occupational Health and Safety Act. The Ministry of Labour (MOL) provides provincial enforcement of the WHMIS Regulation.

Controlled Products

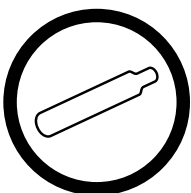
According to the Workplace Hazardous Materials Information System, Regulation 860, a controlled product is defined as:

“...a product, material or substance determined in accordance with Part IV of the Controlled Products Regulations (Canada) to be included in a class listed in Schedule II of the Hazardous Products Act (Canada)” (s.1)

A controlled product, therefore, is any product or ingredient that meets the criteria for one or more of the classes of hazards established by WHMIS. The Hazardous Products Act, Schedule I and II, outline what products are covered by the Act, and subsequently, the WHMIS regulations.

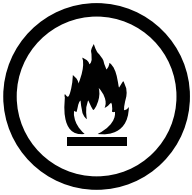
Section 12 of the Hazardous Products Act states that if a product is controlled by another regulation (e.g., Explosives Act), it does not fall under the WHMIS regulation (they are exempt). If it is bought as a consumer product then it is not covered by WHMIS as it falls under different legislation. Although certain products may not be regulated by WHMIS regulations as far as labeling and MSDS requirements are concerned, there still is an expectation of education of workers on any hazards that may exist with these chemicals.

Classes of WHMIS



CLASS A – Compressed Gas

Contents inside the container are under pressure. If the container is damaged, there is a risk of explosion or the product may act as a rocket if dropped.



CLASS B – Flammable and Combustible Material

Products can ignite, explode or react with other chemicals. There are six divisions under Class B:

- Division 1: Flammable Gas
- Division 2: Flammable Liquid
- Division 3: Combustible Liquid
- Division 4: Flammable Solid
- Division 5: Flammable Aerosol
- Division 6: Reactive Flammable Material



CLASS C – Oxidizing Material

If this product comes into contact with oxygen or other organic material, it will ignite or explode.

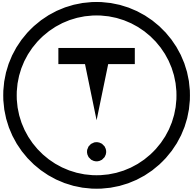
CLASS D – Poisonous and Infectious Material

There are three divisions under Class D:



Division 1: Materials causing immediate and serious toxic effects

A worker can be poisoned or killed if this product enters the body.



Division 2: Materials causing other toxic effects

Workers may experience chronic health effects from exposure to the material.

- Subdivision A: Very toxic material
- Subdivision B: Toxic material



Division 3: Biohazardous Infectious Material

Worker may become infected with a disease if contact is made with this product.



CLASS E – Corrosive material

Skin can burn or the worker may experience severe eye and skin irritations.



CLASS F – Dangerously reactive material

Highly unstable material that can react to other products, heat, light.

Supplier and workplace labels are required by WHMIS legislation

Supplier Label

The label is created by the supplier and should be affixed to the product container before shipping to a company. According to section 19(1), of the Controlled Products Regulation, seven items must be present on a Supplier Label:

1. Product Name

- Can be the chemical, common generic or trade name
- If the name is a trade secret, a code can be used in its place

2. Supplier Name

3. Statement of MSDS

- Proof of an MSDS sheet with more information

4. Appropriate Hazard Symbol

- The symbol for the class the product falls into; if it falls into both Division 1 and 2 of class D, then only the symbol for Division 1 is required

5. Risk Phrases

- Warnings about potential health risks (e.g., eye irritant)

6. Precautionary Measures

- Safety precautions to be taken when using the product (e.g., face protection)

7. First aid measures

- First aid procedures until proper medical assistance is available

The supplier label must be in English and French and surrounded by a hatched border, in a contrasting colour to the product it is being affixed to. If the supplier places the product into a container that is 100 millilitres or less, then the supplier label only needs to include information from points one to four above [Controlled Products Regulation, s.19(1)].

Workplace Label

A workplace label is used when the product is being transferred from its original supplier container into a different one. It is also used when the supplier label is illegible, accidentally removed, or the product is produced in the workplace.

Workplace labels must contain the following information:

1. Identity of product
2. Safe handling procedures for the product
3. Statement that a MSDS is available

Material Safety Data Sheet (MSDS)

An MSDS contains storage and handling information for the product. Any controlled product that falls under one of the WHMIS classifications will require an MSDS. According to the Controlled Products Regulation, It must contain nine categories with the following information:

1. Product Information

- Identifies the product, manufacturer/supplier, and use of the product

2. Hazardous Ingredients

- Name, concentration, and toxicity of each ingredient
- Trade secret ingredients do not need to be included on the sheet

3. Physical Data

- Describes physical properties of the product (e.g., powder vs. solid)

4. Fire/Explosion Hazard

- Conditions where the product can catch fire or explode

5. Reactivity Data

- How reactive the product is to other chemicals

6. Toxicological Properties

- How the product can enter the body (e.g., inhalation, ingestion, absorption)
- Short and long-term health effects on workers

7. Preventive Measures

- Precautions that should be taken by workers when using this product
- Product handling precautions during transportation, storage, use, and disposal
- Emergency procedures

8. First Aid Measures

9. Preparation Information

- Name and phone number of the person/group who created the MSDS and the date it was created

Although in Canada the regulation outlines the above nine categories as what an MSDS should be compiled of, it is commonplace to see a 16 version of an MSDS in Canada – the American standard for an MSDS is a 16 section. This version contains all the information listed above, therefore, is has been allowed as an appropriate layout for an MSDS.

Updating MSDSs

MSDSs must be updated every three years. According to the Workplace Hazardous Material Information System regulation, section 18(4), if any information on the MSDS changes prior to this, a new sheet must be issued within ninety days. The issue date must be changed and the employer must be notified if there is an updated MSDS. MSDSs must be sent on the first shipment to a workplace. If it is not included, the employer must obtain a copy of the MSDS from the supplier/shipper. The product can be stored, but not used, until a MSDS has been obtained.

WHMIS Training Requirements

One of the three essential elements of the Workplace Hazardous Materials Information System (WHMIS) is the worker education program. By law, the employer must provide information and instruction to all workers who work with, or near a controlled product (WHMIS Reg. 860, s.6). This means that the employer must provide training to: anyone who stores, handles, uses or disposes of the product; anyone who immediately supervises another worker who performs the above duties; anyone whose health and safety could be at risk during storage, handling, use or disposal of a controlled product; during maintenance activities; or during emergencies such as spills.

The employer must also consult with the joint health and safety committee or health and safety representative in the development, implementation, and review of the WHMIS worker education program. This program must be reviewed at least once a year, or more often if new information on a controlled product becomes available, or if workplace conditions change (OHSA, s.42). The review is intended to identify whether worker retraining and updating of the education program are necessary This Info Sheet is designed to help your company assess and respond to its training needs, and in doing so, comply with the WHMIS training requirements.