

## 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 (MSDSs), and worker education and training.

## When do I need a WHMIS program?

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

## What laws affect WHMIS?

WHMIS standards are coordinated between three levels of government: federal, provincial, and 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.

3. **Hazardous Materials Information Review Act**
4. **Creation of Information Review Commission**
  - Rules and exemptions regarding confidential business information disclosure
  - Defines what information suppliers/employers can withhold from labels/MSDSs
5. **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.

## What is a controlled product?

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 is considered to be 'controlled'.

## Where can I find a list of controlled products that are controlled?

The *Hazardous Products Act*, Schedule I and II outline what products are covered by the Act, and subsequently, WHMIS regulations.

## Are there products that do not fall under WHMIS?

Yes. Section 12 of the *Hazardous Products Act* states that products that are controlled by other regulations (i.e., Explosives Act) do not fall under WHMIS regulation.

If it is bought as a consumer product then it is not covered by WHMIS as it falls under different legislation.

## What are the 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



A 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, or sudden movements.

## What labels are needed?

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:

- 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
- Supplier Name**
- Statement of MSDS**
  - Proof of an MSDS sheet with more information
- 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 (i.e., eye irritant)

### 6. Precautionary Measures

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

### 7. First aid measures

- First aid procedures until the arrival of proper medical assistance

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)].



Source: Workplace Hazardous Materials Information System (WHMIS): A Guide to the Legislation, Ministry of Labour

### 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:

- Identity of product.
- Safe handling procedures for the product.
- Statement that a MSDS is available.

## What is a Material Safety Data Sheet (MSDS)?

MSDSs contain correct handling information for the product. It is broken into 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 (i.e., 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 (i.e., 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

## What products need a MSDS?

Any controlled product that falls under one of the WHMIS classifications will require a MSDS.

## How often do I need to update a MSDS?

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.

## Where can I find information about WHMIS training?

Anyone who works with or near a controlled product must be trained in WHMIS. For more information on training requirements, see the IAPA handout, “WHMIS Training Requirements”.

### Resources:

Workplace Hazardous Materials Information System (WHMIS): A Guide to the Legislation Ontario Ministry of Labour, February 2001

<http://www.labour.gov.on.ca/english/hs/whmis/>

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