




WHMIS WITH GHS - STUDY GUIDE

This is IS2's basic introduction to WHMIS with GHS - the Workplace Hazardous Materials Information System with Globally Harmonized Standard

- **The most important thing you need to know about WHMIS is that if you see a product with a hazard label... STOP! Never handle it until you have been properly trained by your supervisor.**

WHMIS with GHS is the new WHMIS and has applied some changes to previous WHMIS. GHS means "Globally Harmonized System" meaning hazard classification is now the same in every country, worldwide. In addition, some of the imagery has changed. Under WHMIS with GHS most hazardous materials must now be identified with images known as "pictograms" which show a symbol of the type of hazard inside of a distinctive red diamond  (except biohazards which are inside a black circle – the same as they were in the previous WHMIS). In addition, safety information for hazardous materials is contained in what are now known as Safety Data Sheets. What has not changed is the basic responsibilities of suppliers, employers and workers and the main purpose of WHMIS which is to provide awareness, education, and safe handling and storage procedures for working with hazardous materials.

WHMIS still requires 1) Labels (Supplier and Workplace) 2) Hazard Classifications (or pictograms) 3) Worker Education and 4) Safety Data Sheets. These are all designed to protect workers from exposure to hazardous materials.

The Responsibilities for Workplace Parties under WHMIS Law:

Under the WHMIS regulations the 3 workplace groups (Suppliers, Employers and Workers) all have responsibilities for working with hazardous products:

Suppliers must:

- Label potentially hazardous materials with supplier labels
- Provide Safety Data Sheets (SDSs) for each hazardous product they sell for use at work sites
- Ensure the appropriate classification of hazardous products

Employers must:

- Ensure workplace hazardous products are properly labeled with workplace or supplier labels
- Ensure that if hazardous products are moved from supplier containers, that they have workplace labels
- Ensure SDSs available and accessible to workers for any hazardous product
- Ensure workers know what hazardous materials are present at the work site
- Ensure procedures are established for handling hazardous materials and dealing with emergencies
- Ensure workers are properly trained and educated to handle WHMIS materials

Workers must:

- Participate in WHMIS education and training
- Use WHMIS information to protect themselves and others at the workplace
- Tell their employer immediately if they see a WHMIS product that has a missing or unreadable label

There are four 4 Main Parts of WHMIS

1) Labels, 2) Hazard Classifications (pictograms) 3) Worker Education and 4) Safety Data Sheets

Part 1) Labels:

There are two types of WHMIS labels. 1) The Supplier label and 2) The Workplace label.

1) Supplier Labels

A supplier label is attached by the supplier and must appear on all hazardous products received at a workplace. Supplier labels must be written in English and French and must include the following information:

- **Product Identifier** - the brand name, chemical name and common name of a product.
- **Initial Supplier Identifier** - the name, address and phone number of the manufacturer
- **Pictogram(s)** - hazard symbol inside of a RED diamond shape
- **Signal Word** - a word used to alert readers to hazards and severity (*i.e. "DANGER" or "TOXIC"*)
- **Hazard Statement(s)** - phrases which describe the nature of the hazard posed
- **Precautionary Statement(s)** - phrases that describe steps to minimize or prevent negative effects resulting from exposure to a hazardous product (as a result of spills or improper handling)

If the hazardous product is always used in the container with the supplier label, no other label is required.

If it is transferred to a different container it must have a new Workplace label.

2) Workplace Labels

A workplace label must appear on all hazardous products in the following situations:

- For products produced on site
- If a product is transferred from one container to another (*i.e. supplier container to workplace container*)
- When workers are unable to read English or French
- To replace labels that have been lost or damaged or have become unreadable





The workplace label must contain:

- **Product Name** (matching the SDS product name).
- **Safe Handling Precautions**, may include pictograms or other supplier label information.
- **A Reference to the SDS** (if available).
- **Other Workplace Label Requirements** – that fall under specific provincial or territorial jurisdiction.






Part 2) Workplace Hazard Classification (Pictograms) for WHMIS Labels

WHMIS has 9 main pictograms (symbols) to identify hazardous products. They are split into 2 main classes for materials with **Physical Hazards** and materials with **Health Hazards**.


Materials which pose **Physical Hazards** must include these pictograms and have these potential risks:

			
Exploding Bomb Materials may explode due to reaction to fire, shock, friction, heat, puncture, or incompatible material	Flame Materials will continue to burn after exposure to flames or other ignition source • May ignite if exposed to heat, sparks, friction, flames or incompatible material	Flame over circle Materials can cause other materials to burn or support combustion • Oxidizing Gases, Liquids or Solids • May cause fire or explosion or enhance other material combustion	Gas cylinder Materials are gaseous and kept in a pressurized container • May explode if heated, punctured or dropped

Materials which pose **Health Hazards** must include these pictograms and have these potential risks:

				
Corrosion Materials which react with metals and living tissue and can cause: • Skin corrosion or burns • Serious eye damage • Corrosion to metals	Skull & Crossbones Materials which can cause toxicity or death even in small quantities	Exclamation Mark Materials which can cause immediate and severe harm including poisoning. Or less serious conditions like: • Skin/Eye Irritation • Skin Sensitization • Acute Toxicity Or can damage the ozone layer.	Health Hazard Materials can cause or are suspected of causing serious long term health effects	Biohazardous Infections Materials may contain infectious agents or biological toxins that cause disease, death or anaphylactic shock • Exposure to viruses, yeasts, molds, bacteria, and parasites which cause disease in animals or humans





WHMIS with GHS also has a new Hazard Class for products with **Environment Hazards**. These must include this pictogram and have these potential risks:

	<u>Environmental Hazards</u> These materials may be harmful to aquatic life or cause long-lasting effects to the aquatic environment and must be disposed of properly as per regulatory requirements.
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Consumer Hazard Pictograms

Consumer labels are not specifically a part of **workplace** WHMIS. They are for products available to consumers in stores. However, they can show up on products in workplaces such as cleaning products.

Everyone should be aware of consumer products with similar hazard symbols that indicate risks for handling hazardous products. →

			
Poisonous	Causes Burns	Fire Hazard	Explosion hazard



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Part 3) Safety Data Sheets (SDSs)

Suppliers must provide an accurate SDS for every hazardous product they sell. The SDS provides additional information that cannot be contained on a label. The SDS must be kept where it can be seen and accessed by everyone who works with a WHMIS product. Suppliers must also update the SDS if any new information becomes available.

The SDS has four main purposes. To provide information on:

- 1) **Identification:** for the product and supplier
- 2) **Hazards:** physical (fire and reactivity) and health
- 3) **Prevention:** steps you can take to work safely, prevent exposure, or in an emergency
- 4) **Response:** appropriate responses in various situations (i.e. first-aid, fire, spill etc).

There are 16 sections of safety information in an SDS

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|---|-------------------------------------|
| 1) Identification* | 9) Physical and chemical properties |
| 2) Hazard identification* | 10) Stability and reactivity |
| 3) Composition and information on ingredients | 11) Toxicological information |
| 4) First-aid measures* | 12) Ecological information |
| 5) Fire-fighting measures* | 13) Disposal considerations |
| 6) Accidental release* | 14) Transport information |
| 7) Handling and storage* | 15) Regulatory information |
| 8) Exposure controls/Personal protection | 16) Other information |

However, for most people who work with hazardous products, you should ensure to:

- Read the name of the chemical (***Section 1**)
- Know the hazards (***Section 2**)
- Understand safe handling and storage instructions (***Section 7**) and
- Understand what to do in an emergency (***Sections 4, 5 and 6**).

If you don't know where an SDS is located, always ask your Employer.

Part 4) Worker Education

Employers have to update their education and training programs to ensure that workers are informed about WHMIS with GHS requirements on labels.

Workers have a responsibility to:

- Participate in WHMIS education and training
- Use WHMIS information to handle materials properly to protect themselves and others at the workplace
- Tell their employer immediately if they see a WHMIS product that has a missing or unreadable label

Workers should never handle or transport hazardous materials for which the SDS is missing or the label is missing or unreadable; this can be considered dangerous work and you have a right to refuse.

Conclusion and The Most Important Thing about Working with WHMIS

Now you should have a good idea about the basic responsibilities, regulations and considerations for working with WHMIS. You can always contact your IS2 Rep for more information about working with WHMIS materials or if you feel anything is unsafe at a work site. However, always remember:

- **The most important thing you need to know about WHMIS is that if you see a product with a hazard label... STOP! Never handle it until you have been properly trained by your supervisor.**