

Revised: June 2023

#### SWP-33 HAZARDOUS MATERIALS/PRODUCTS/SUBSTANCES WHMIS 2015 (Workplace Hazardous Material Information System)/ GHS (Global Harmonized System)

# **PURPOSE/APPLICATION**

To protect workers from injuries associated with the use, care, and handling of hazardous materials, products, and substances. Strike will provide training and information to all employees to reduce the health and safety risks associated with the use, care, and handling of hazardous materials, products, and substances in the workplace.

### PPE

- Strike minimum requirements
   As per SDS
- **TRAINING**

- WHMIS 2015
- HAZARDS & CONCERNS
  - Personal injury Property damage
- Fire/burn

Occupational illness

## WHMIS had an update in 2015

WHMIS was updated in 2015 to align with the Global Harmonized System (GHS) of classifying and labeling of chemicals.

GHS was developed by the United Nations and provides a standardization for:

- Definitions and Classifications of Hazardous Chemicals
- Format and Content of Labels
- Format and Content of Safety Data Sheets (SDSs)

### **PRECAUTIONS**

- Keep work area clean and orderly.
- Know the location of decontamination stations (e.g., eyewash stations, showers) and how to use them prior to commencing work.
- Read the applicable Code of Practice and safe work practices associated with the use, care, and handling of hazardous materials, products, and substances (e.g. Asbestos, Benzene, Radiation, Lead, H2S, etc.)
- Inspect all personal protective equipment to ensure that it can perform the functions for which it was designed.
- Label all hazardous materials, products, and substances according to guidelines specified through your WHMIS 2015 training.
- Wear the proper personal protective equipment required for each job that you perform.
- Read the SDS and labels to know the procedures for safe use, storage, and handling of all hazardous materials, products, and substances you work with.
- Store incompatible hazardous materials, products, and substances in separate areas.
- Know all the hazards (e.g., fire/explosion, health, chemical reactivity, corrosivity, pressure) of the hazardous materials, products, and substances you work with.
- Limit the volume of hazardous materials, products, and substances to the minimum needed for short operational periods.
- Know all emergency procedures associated with all hazardous materials, products, and substances you work with.
- Ensure that all hazardous materials, products, and substances are contained in the event that a storage container should break or spill its contents.

### **Roles and Responsibilities**

Everyone has a role to play when it comes to understanding and executing WHMIS 2015.

### Employees

• Take part in WHMIS 2015 and chemical safety training programs



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- Take necessary steps to protect themselves and their co-workers
- Participate in identifying and controlling hazards

### Employers

- Educate and train workers on the hazards and safe use of hazardous products in the workplace
- Ensure that hazardous products are properly labelled
- Educate and train workers on the hazards and safe use of hazardous products in the workplace
- Prepare workplace labels and SDSs (as necessary)
- Ensure that hazardous products are properly labelled
- Ensure that up-to-date SDSs are readily available to workers (SDSBinders)
- Ensure effective control measures are in place to protect the health and safety of workers

### Suppliers, Manufacturers and Distributors

- Ensure the appropriate classification of hazardous products
- Obtain or prepare up to date labels and SDSs for all hazardous products they sell or produce

### Hazard Groups and Classes Under WHMIS 2015

Hazards have been grouped together based on their similar properties. A hazardous product can fall into one or more of the hazard classes. Suppliers classify these products and assign one or more of the appropriate pictograms.

The standardized pictograms act as visual easy-to-understand tool to help immediately identify the types of hazards present in various hazardous products and how to handle the products according to prescribed safety measures.

Pictogram	Explaination				
	<ul> <li>The <b>exploding bomb</b> pictogram is used for the following classes and categories:</li> <li>Self-reactive substances and mixtures (Types A and B*)</li> <li>Organic peroxides (Types A and B*)</li> </ul>				
	<ul> <li>The flame pictogram is used for the following classes and categories:</li> <li>Flammable gases (Category 1)</li> <li>Flammable aerosols (Category 1 and 2)</li> <li>Flammable liquids (Category 1, 2 and 3)</li> <li>Flammable solids (Category 1 and 2)</li> <li>Pyrophoric liquids (Category 1)</li> <li>Pyrophoric solids (Category 1)</li> <li>Pyrophoric gases (Category 1)</li> <li>Self-heating substances and mixtures (Category 1 and 2)</li> <li>Substances and mixtures which, in contact with water, emit flammable gases (Category 1, 2 and 3)</li> <li>Self-reactive substances and mixtures (Types B*, C, D, E and F)</li> <li>Organic peroxides (Types B*, C, D, E and F)</li> </ul>				
	<ul> <li>The flame over circle pictogram is used for the following classes and categories:</li> <li>Oxidizing gases (Category 1)</li> <li>Oxidizing liquids (Category 1, 2 and 3)</li> <li>Oxidizing solids (Category 1, 2 and 3)</li> </ul>				



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	<ul> <li>The gas cylinder pictogram is used for the following classes and categories:</li> <li>Gases under pressure (Compressed gas, Liquefied gas, Refrigerated liquefied gas, and Dissolved gas)</li> </ul>					
	<ul> <li>The corrosion pictogram is used for the following classes and categories:</li> <li>Corrosive to metals (Category 1)</li> <li>Skin corrosion/irritation - Skin corrosion (Category 1, 1A, 1B and 1C)</li> <li>Serious eye damage/eye irritation - Serious eye damage (Category 1)</li> </ul>					
	The <b>skull and crossbones</b> pictogram is used for the following classes and categories: • Acute toxicity -					
	<ul> <li>The exclamation mark pictogram is used for the following classes and categories:</li> <li>Acute toxicity – Oral, Dermal, Inhalation (Category 4)</li> <li>Skin corrosion/irritation – Skin irritation (Category 2)</li> <li>Serious eye damage/eye irritation – Eye irritation (Category 2 and 2A)</li> <li>Respiratory or skin sensitization – Skin sensitizer (Category 1, 1A and 1B)</li> <li>Specific target organ toxicity – Single exposure (Category 3)</li> </ul>					
	<ul> <li>The health hazard pictogram is used for the following classes and categories:</li> <li>Respiratory or skin sensitization - Respiratory sensitizer (Category 1, 1A and 1B)</li> <li>Germ cell mutagenicity (Category 1, 1A, 1B and 2)</li> <li>Carcinogenicity (Category 1, 1A, 1B, and 2)</li> <li>Reproductive toxicity (Category 1, 1A, 1B and 2)</li> <li>Specific Target Organ Toxicity - Single exposure (Category 1 and 2)</li> <li>Specific Target Organ Toxicity - Repeated exposure (Category 1 and 2)</li> <li>Aspiration hazard (Category 1)</li> </ul>					
¥2	<ul> <li>The environmental hazard pictogram is used for the following classes and categories:</li> <li>Acute hazards to the aquatic environment, category 1</li> <li>Chronic hazards to the aquatic environment, categories 1, 2</li> <li>Environmental toxicity, categories 1, 2</li> </ul>					
	<ul> <li>The biohazardous infectious materials pictogram is used for the following classes and categories:</li> <li>Biohazardous Infectious Materials (Category 1)</li> </ul>					



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## Supplier and Workplace Labels

Supplier labels have been simplified and standardized to include pictograms, signal words, hazard statements and precautionary statements.

The supplier label does not have a set format however it must be:

- Clearly and prominently displayed on the container
- Easy to read (i.e., you can see it easily without using an item except corrective lenses)
- In contrast with other information on the product or container
- In English and French (on one or two labels)

Workplace labels are flexible in their format. The wording and language(s)

used can be chosen to fit the specific workplace. The workplace label must be legible and replaced if damaged.

The following information must be on a workplace label:

- Product name identical to the one found on the product's Safety Data Sheet (SDS)
- Safe handling information
- A reference to the availability of the Safety Data Sheet (SDS)

The use of workplace label is required when:

- A hazardous product is transferred to another container
- A secondary container is being used for the hazardous product
- The hazardous product was made in the workplace
- The supplier label has been lost or damaged

### **REFERENCES / ADDITIONAL INFORMATION**

- Safety Data Sheets (MSDS)
- WHMIS Labels
- COP 01 H2S Environment (Working In)
- SDSBinders Software https://cw1635439.sdsbinders.com/Default.aspx?ReturnUrl=%2F

### **REGULATIONS**

#### **Alberta OHS Code**

Part 4 – Chemical Hazards, Biological Hazards and Harmful Substances Part 29 – Workplace Hazardous Materials Information System (WHMIS)

### Saskatchewan OHS Regulation

Part XXI – Chemical and Biological Substances Part XXII – Controlled Products — Workplace Hazardous Materials Information System

### **British Columbia OHS Regulation**

Part 5 - Chemical Agents and Biological Agents

## Manitoba

Part 36: Chemical and Biological Substances

Acetylene Praxair Canada Inc Praxair Canada



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