

WHMIS 2015

Canada has aligned the Workplace Hazardous Material Information System (WHMIS) with the Globally Harmonized System of Classification and Labelling of Chemicals. (GHS).

Health Canada is the government body responsible for making the required changes to the overall federal WHMIS- related laws.

What is WHMIS?

WHMIS stands for the Workplace Hazardous Material Information System. It is a comprehensive system for providing health and safety information on hazardous products intended for use, handling, or storage in Canadian workplaces.

WHMIS has aligned with the worldwide hazard communication system known as GHS – the Globally Harmonized System of Classification and Labelling of Chemicals. Aligning with GHS provides many benefits, including:

- Hazard classification criteria are more comprehensive which improves ability to indicate severity of hazards.
- New Hazard classes are included.
- Physical hazard criteria are consistent with the Transport of Dangerous Goods (TDG regulations).
- Standardized language (hazard and precautionary statements).
- Standardized SDS format and more comprehensive requirements.

What are the main parts of WHMIS?

The main components of WHMIS are hazard identification and product classification, labelling, safety data sheets, and worker education and training.

Is WHMIS law?

Yes. WHMIS first became law in 1988 through a series of complementary federal, provincial and territorial legislation and regulations. This original system will be identified as WHMIS 1988. Updates to implement GHS will be referred to as WHMIS 2015.

What is a SDS?

Safety Data Sheets (SDSs) are summary documents that provide information about the hazards of a product and advice about safety precautions. SDSs are usually written by the manufacturer or supplier of the product.

SDSs provide more detailed hazard information about the product than the label. They are an important resource for workplaces and workers to help you learn more about the product(s) used. Use this information to identify the hazards of the products you use and to protect yourself from those hazards, including safe handling and emergency measures.

SDSs tell users what the hazards of the product are, how to use the product safely, what to expect if the recommendations are not followed, how to recognize symptoms of exposure, and what to do if emergencies occur.

Every product that is classified as a “hazardous product” under WHMIS that is intended for use, handling or storage in a workplace in Canada must have an SDS.

What information is on the SDS?

- 1. Identification:** Product identifier, recommended use and restrictions on use, supplier contact information, emergency phone number.
- 2. Hazard identification:** Classification (hazard class and category), label elements (including hazard pictogram, signal word, hazard statement and precautionary statements) and other hazards (e.g. thermal hazards)
- 3. Composition/Information:** For a hazardous product that is a substance: the chemical name, synonyms, CAS No. and the chemical name of impurities, stabilizing solvents and stabilizing additives where classified and that contribute to the classification of the product.

For a hazardous product that is a mixture: for ingredients that present a health hazard, the chemical name, synonyms, CAS No. and concentration.
- 4. First-aid measures:** First-aid measures by route of exposure as well as most important symptoms/effects
Inhalation
Skin contact
Eye contact
Ingestion

5. Fire-fighting measures: Suitable (and unsuitable) extinguishing media, specific hazards, Special equipment and precautions for fire fighters
6. Accidental release measures: Protective equipment, emergency procedures, methods and materials for containment and clean up.
6. Accidental release measures: Protective equipment, emergency procedures, methods and materials for containment and clean up.
7. Handling and storage: Precautions for safe handling, conditions for storage, including any incompatibilities.
8. Exposure controls/
Personal protection: Exposure limits, engineering controls, personal protective equipment.
9. Physical and chemical properties: Appearance , odour, odour threshold, pH, melting/freezing point, boiling point and range, flash point, upper and lower flammable or explosive limits.
10. Stability and reactivity: Reactivity, chemical stability, possible hazardous reactions, conditions to avoid, incompatible materials, hazardous decomposition products.
11. Toxicological Information: Description of various toxic effects by route of entry, including effects of acute or chronic exposure, carcinogenicity, reproductive effects, respiratory sensitization.
12. Ecological Information: Aquatic and terrestrial toxicity (if available), persistence and degradability, bioaccumulative potential, mobility in soil.
13. Disposal considerations: Safe handling and methods of disposal, including contaminated packaging.
14. Transport information: UN number and proper shipping name, hazard classes, packing group.
15. Regulatory information: Safety, health and environmental regulations specific to the product.
16. Other Information: Other information, including date of the latest revision of the SDS.

NOTE: 12, 13, 14 & 15 – Require the headings to be present. The supplier has the option to not provide information in these sections.

HAZARD CLASSES

Physical Hazard Classes

Combustible Dusts
Corrosive to Metals
Flammable Gases
Flammable Liquids
Flammable Solids
Gases Under Pressure
Organic Peroxides
Oxidizing Gases
Oxidizing Liquids
Oxidizing Solids
Pyrophoric Gases
Pyrophoric Liquids
Pyrophoric Solids
Self-Heating Substances and Mixtures
Self-Reactive Substances and Mixtures
Simple Asphyxiants
Substances and Mixtures Which, in Contact with Water Emit Flammable Gases
Physical Hazards Not Otherwise Classified

Health Hazard Classes

Acute Toxicity
Aspiration Hazard
Biohazardous Infectious Materials
Carcinogenicity
Reproductive Toxicity
Respiratory or Skin Sensitization
Serious Eye Damage/Eye Irritation
Skin Corrosion/Irritation
Specific Target Organ Toxicity -Repeated Exposure
Specific Target Organ Toxicity -Single Exposure
Health Hazards Not Otherwise Classified

WHMIS 2015 DOES NOT
INCORPORATE
THE GHS EXPLOSIVES AND
ENVIRONMENTAL HAZARD CLASSES

WHMIS 2015 Labels

1 Product Identifier

The product name exactly as it appears on the container and on the Safety Data Sheet (SDS).

2 Hazard Pictograms

Hazard pictograms, determined by the hazard classification of the product. In some cases, no pictogram is required.

3 Signal Words

"Danger" or "Warning" are used to emphasize hazards and indicate the severity of the hazard.

4 Hazard Statements

Brief standardized statements of all hazards based on the hazard classification of the product.

5 Precautionary Statements

These statements describe recommended measures to minimize or prevent adverse effects from exposure to the product, including protective equipment and emergency measures.

6 Supplier Identifier

The company which made, packaged, sold or imported the product, and is responsible for the label and SDS.

7 Safe Handling Precautions

May include pictograms or other supplier label information.

8 Reference to SDS

If available.

Supplier Label

1 Product K1 / Produit K1



3 Danger

4 Fatal if swallowed.
4 Causes skin irritation.

5 Precautions:

Wear protective gloves.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.

Store locked up.
Dispose of contents/containers in accordance with local regulations.

IF ON SKIN: Wash with plenty of water.
If skin irritation occurs: Get medical advice or attention.

Take off contaminated clothing and wash it before reuse.

IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
Rinse mouth.

Danger

Mortel en cas d'ingestion.
Provoque une irritation cutanée.

Conseils :

Porter des gants de protection.
Se laver les mains soigneusement après manipulation.
Ne pas manger, boire ou fumer en manipulant ce produit.

Garder sous clé.
Éliminer le contenu/récipient conformément aux règlements locaux en vigueur.

EN CAS DE CONTACT AVEC LA PEAU : Laver abondamment à l'eau.
En cas d'irritation cutanée : Demander un avis médical/consulter un médecin.

Enlever les vêtements contaminés et les laver avant réutilisation.
EN CAS D'INGESTION : Appeler immédiatement un CENTRE ANTIPOISON ou un médecin.
Rincer la bouche.

6 ABC Chemical Co., 123 rue Anywhere St., Mytown, ON NON ONO (123) 456-7890

Workplace Label*

1 Product K1

7 Danger

Fatal if swallowed. Causes skin irritation.

Wear protective gloves (neoprene). Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

8 See SDS for more information.

*Requirements may vary – consult your local jurisdiction for their requirements.



WHMIS Pictograms

Workplace Hazardous Materials Information System

2015

Flame

Flammable
Self-Reactive
Pyrophoric
Self-Heating
In Contact with Water,
Emits Flammable Gases
Organic Peroxide



Flame over Circle

Oxidizer



Exploding Bomb

Explosive*
Self-Reactive (severe)
Organic Peroxide (severe)



Gas Cylinder

Gas Under Pressure

Skull and Crossbones

Acute Toxicity
(fatal or toxic)



Corrosion

Serious Eye Damage
Skin Corrosion
Corrosive to Metals

Biohazardous

Biohazardous Infectious
Materials



Exclamation Mark

Irritation (skin or eyes)
Skin Sensitization
Acute Toxicity (harmful)
Specific Target Organ
Toxicity
(drowsiness or dizziness,
or respiratory irritation)
Hazardous to the
Ozone Layer*



Health Hazard

Carcinogenicity
Respiratory Sensitization
Reproductive Toxicity
Specific Target Organ
Toxicity
Germ Cell Mutagenicity
Aspiration Hazard



Environment

Aquatic Toxicity*

A GHS pictogram appropriate for the hazard

Physical Hazards Not Otherwise Classified
Health Hazards Not Otherwise Classified

NOTE: No pictogram is assigned to some hazard classes e.g., Combustible Dusts and Simple Asphyxiants, and some less severe hazard categories.

*Not required by WHMIS, but may be used.