

WHMIS 2015



WHMIS 2015 is a Canada Wide initiative, also referred to as Global Harmonization System, or GHS

What is WHMIS?

- WHMIS stands for the Workplace Hazardous Materials 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 Labeling of Chemicals. Aligning with GHS provides many benefits, including:
 - Hazard classification criteria that are more comprehensive which improves the 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 Components?

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

Changes to WHMIS

- Adopts new international standards for classifying hazardous workplace chemicals
- Has updated the information on labels to include pictograms,
- Update the format of safety data sheets
- Classify hazardous products into two broad hazard groups, physical hazards and health hazards
- Updated the term “controlled products” to “hazardous products” to be consistent with federal WHMIS legislation

- The new WHMIS will present information in a consistent manner in all safety data sheets, regardless of supplier
- Ensures that the information that workers and emergency responders need most appears first on labels and safety data sheets

career1 Phase 1 - February 11, 2015 to May 31, 2018

- Chemical manufacturers or importers may sell hazardous products with either the old WHMIS labels and safety data sheets or the new ones
- Employers may receive and use hazardous products with either the old WHMIS labels and safety data sheets or the new ones

Phase 2 - June 1, 2018 to August 31, 2018

- Chemical distributors (Note: this does not apply to manufacturers anymore) may continue to sell hazardous products with either the old WHMIS labels and safety data sheets or the new ones
- Employers may continue to receive and use hazardous products with either the old WHMIS labels and safety data sheets or the new ones.

Phase 3 – Sept. 1, 2018 to Nov. 30, 2018

Employers should only be receiving hazardous products with WHMIS 2015 labels and safety data sheets.

Employers have the final three months to bring their existing inventories of hazardous products into compliance with WHMIS 2015

December 1, 2018

- The transition to WHMIS 2015 must be complete for all manufacturers, importers distributors, suppliers and employers
- There should be no hazardous products in the workplace with old WHMIS labels and safety data sheets.

career1 Supplier's Responsibilities

- Suppliers are those organizations who, in the course of business, sell or import hazardous products. Suppliers must ensure the appropriate classification of hazardous products. This classification is determined based on comparison of all available hazard data for the ingredients or mixture to the WHMIS requirements as outlined in the Hazardous Products Regulations (WHMIS 2015) or the Controlled Products Regulations (WHMIS 1988).
- When a product is considered to be a "hazardous product", the supplier must label the product or container and they must provide a safety data sheet (SDS) to their customers. The purpose of the label is to clearly identify the hazardous product, the supplier, the hazards and precautionary measures. The SDS provides more information about that product.

Employer's Duties

When a hazardous product is used in the workplace, employers are required to:

- Educate and train workers on the hazards and safe use of products.
- Ensure that hazardous products are properly labeled.
- Prepare workplace labels, as needed.
- Prepare Safety Data Sheets (SDS), as necessary (e.g., if an employer manufactures a hazardous product that is used on-site).
- Provide access to up-to-date SDSs to workers.
- Ensure appropriate control measures are in place to protect the health and safety of workers

career1 Workers' Responsibilities

- Workers will participate in WHMIS education and training programs, take necessary steps to protect themselves and their co-workers, and participate in identifying and controlling hazards.

Why Are Some Generic Chemicals Listed on an SDS?

- This listing indicates that the supplier has applied to have the exact ingredients in the hazardous product considered as "confidential business information" (CBI). There is a strict process that must be followed to have an ingredient or ingredients considered as confidential business information, and approval is only granted by Health Canada. For example, a CBI claim may be granted if stating the ingredient name on the SDS would give competitors of that product financial gain and/or there was a significant cost to the development of the product.
- Each claim is given a Registry Number. The Registry Number and approval or filing date must be shown on the SDS. If the name of an ingredient is claimed as CBI, a generic chemical identity must be listed, as well as all physical or health hazard information, preventive measures, and first aid.

SDS Headings

The Safety Data Sheet is designed to help you to protect yourself against hazardous chemicals.

In the past, it was a time consuming process to find locate the information you needed in a hurry. With the introduction of GHS, the SDS have been standardized. By the end of 2018, all SDS will have the necessary information in the same order as shown below.

The Safety Data Sheet must contain the following 16 headings:

- | | | |
|---|--|-----------------------------|
| 1. Identification of the substance/
mixture and of the company/undertaking | 6. Accidental release measures | 12. Ecological information |
| 2. Hazards identification | 7. Handling and storage | 13. Disposal considerations |
| 3. Composition/information on ingredients | 8. Exposure controls/personal protection | 14. Transport information |
| 4. First aid measures | 9. Physical and chemical properties | 15. Regulatory information |
| 5. Fire-fighting measures | 10. Stability and reactivity | 16. Other information |
| | 11. Toxicological information | |

Heading Meanings

Section 1 contains contact details of the person/company responsible for supplying the chemical, the uses of the chemical, as well as the telephone number to contact in case of an emergency.

Section 2 gives details on the hazards of the chemical and the potential effects and symptoms resulting from use. This will help in the assessment of the risks to health, the health of workers and the environment. The information in this section must be consistent with the information on the label.

Section 3 If the chemical is a mixture, this section will give information on the hazards of each of the individual substances in the mixture.

Section 4 describes the necessary first aid measures to be taken in case of an accident.

Section 5 gives specific information on fighting a fire caused by the chemical, including the most suitable extinguishing media and protective equipment.

Section 6 describes what actions need to be taken if there is an accidental release of the chemical.

Section 7 contains details on how to handle and store the chemical safely.

Section 8 gives details of the steps needed to reduce exposure, e.g. ventilation and the personal protective equipment (PPE) necessary to protect health.

Sections 9, 11 and 12 provide detailed information on the physical, chemical, toxicological and ecological properties of the chemical.

Section 10 contains details of any hazardous reactions that may occur if the chemical is used under certain conditions.

Section 13 explains how the chemical should be disposed of correctly.

Section 14 contains information relating to the transportation of the chemical.


Section 15 contains details on relevant EU/national legislation.

Section 16 gives any other information relevant to the chemical e.g. training advice, full text of hazard statements etc.

In addition, SDSs for substances or for mixtures containing substances that have been registered under REACH are required to include:

- Registration numbers where appropriate
- Exposure Scenarios including any risk management measures required, in an Annex to the SDS for hazardous substances registered at >10 tonnes/year.

SDS LAYOUT

SAFETY DATA SHEET				
CleanIt			Date of Issue: June 2015	
1. Identification of the substance/mixture and of the company/undertaking				
1.1 Product Identifier: Product Identifier (SDS): 0102-000000 Trade Name: 0102-000000 - Synonyms: 0102-000000				
1.2 Relevant identified uses of the substance or mixture and uses advised against: 0102-000000 0102-000000				
1.3 Details of the supplier of the safety data sheet: Company name: Acme Cleaning Ltd., 1 Acme Lane, Ind. Estate, Dublin 123 Telephone number: 01 234 5678 E-mail of responsible person for SDS: tom.acme@clearing.com				
1.4 Emergency telephone number Emergency telephone number: 01 123 4567 (Poisons Centre number)				
2. Hazards Identification				
2.1 Classification of the mixture: Eye Irritant 2, H319 Skin Irritant 2, H315				
2.2 Label elements: Labelling according to Regulation (EC) No 1272/2008: Pictogram:  Signal Word: Warning Hazard Statements: H319 Causes serious eye irritation H315 Causes skin irritation Precautionary Statements: P201+P202 Attention! Read the label carefully P273 Avoid release into the environment P501 Dispose of contents and container as instructed				
2.3 Other Hazards: There are no known other hazards				
3. Composition/Information on Ingredients				
Name	E.C. No.	CAS No.	Content	Classification
ABC	123-456-0	1234-56-7	<1%	Skin Corr. Cat. 1B H314
XYZ	123-789-0	1234-56-0	>99%	Skin Irrit. 2, H315, Eye Irrit. 2, H319
4. First Aid Measures				
4.1 Description of First Aid Measures: See medical attention if any identified substance				
4.2 Most important symptoms and effects, both acute and delayed: Inhalation: Remove victim immediately from source of exposure. Ingestion: Rinse mouth thoroughly. Drink plenty of water. See medical attention immediately. Skin Contact: Remove affected clothes from source of contamination. Remove contaminated clothing. Wash skin thoroughly with water and soap. Use suitable agent to decontaminate skin. See medical attention if contact persists. Eye Contact: Flush eyes with water with plenty of water while holding the eye lids. Remove any contact lenses.				
4.3 Indication of any immediate medical attention and special treatment needed: See medical attention if any identified substance				
5. Fire-Fighting Measures				
5.1 Extinguishing Media Use water or any other extinguishing media appropriate for surrounding materials.				
5.2 Special Hazards arising from the substance or mixture Fire causes formation of toxic gases.				
5.3 Advice for Fire Fighters Fire fighters must wear the following equipment to be safe:				

Supplier labels

WHMIS 1988

WHMIS 2015

ACETONE
ACÉTONE

SEE MATERIAL SAFETY DATA SHEET FOR THIS PRODUCT
VOIR FICHE SIGNALÉTIQUE POUR CE PRODUIT

DANGER! EXTREMELY FLAMMABLE. IRRITATES EYES. HARMFUL IF INHALED

PRECAUTIONS: Keep away from heat, sparks and flames. Ground containers when pouring. Avoid breathing vapors or mists. Avoid eye contact. Avoid prolonged or repeated contact with skin. Wear protective equipment during handling. Use with adequate ventilation especially in enclosed areas. Store in a cool, well ventilated area, away from incompatibles.

FIRST AID: In case of contact with eyes, immediately flush eyes with lots of running water for 15 minutes, lifting the upper and lower eyelids occasionally. Get medical attention immediately. In case of contact with skin, immediately wash skin with lots of soap and water. Remove contaminated clothing and shoes. Get medical attention if irritation persists after washing. Wash clothing before reuse. If inhaled, remove to fresh air. Give artificial respiration if not breathing. Get medical attention immediately if swallowed, and if conscious, immediately induce vomiting by giving 2 glasses of water and sticking a finger down the throat. Get medical attention immediately. Do not give anything by mouth to an unconscious or convulsing person.

ATTENTION: THIS CONTAINER IS HAZARDOUS WHEN EMPTY. ALL LABELLED HAZARD PRECAUTIONS MUST BE OBSERVED.

DANGER! EXTRÊMEMENT INFLAMMABLE. IRRITE LES YEUX. NOCIF SI AVALÉ

MESURES PRÉVENTIVES: Tenir à l'écart de la chaleur, des étincelles et des flammes. Mettre à la terre les contenants lors de l'écoulement. Éviter de respirer les vapeurs ou les brumes. Éviter le contact avec les yeux. Éviter le contact prolongé ou répété avec la peau. Porter un équipement de protection lors de la manipulation. Utiliser avec suffisamment de ventilation surtout dans les endroits clos. Entreposer dans un endroit frais, bien aéré à l'écart des produits incompatibles.

PREMIERS SOINS: En cas de contact, rincer les yeux immédiatement et copieusement avec de l'eau courante pendant 15 minutes en soulevant les paupières intérieures et supérieures de temps en temps. Obtenir immédiatement des soins médicaux. En cas de contact avec la peau, laver immédiatement la région affectée avec beaucoup d'eau et de savon. Retirer les vêtements et les souliers contaminés. Si l'irritation persiste après le lavage, obtenir des soins médicaux. Laver les vêtements avant de les réutiliser. En cas d'inhalation, transporter la victime à l'air frais. En cas d'arrêt respiratoire, pratiquer la respiration artificielle. Obtenir immédiatement des soins médicaux. En cas d'ingestion si la victime est consciente, faire vomir immédiatement en donnant 2 verres d'eau et en insérant un doigt à l'arrière-gorge. Obtenir des soins médicaux immédiats. Ne rien faire avaler à une victime inconsciente ou en convulsions.

ATTENTION: CE CONTENANT EST DANGEREUX LORSQU'IL EST VIDE. CHAQUE INDICATION SUR LES ÉTIQUETTES DE DANGER DOIVENT ÊTRE OBSERVÉES.

Van Waters & Rogers Ltd.
subsidiary of Univar
9800 Van Horn Way, Richmond, B.C. V6X 1E5

VANCOUVER • EDMONTON • CALGARY • SASKATOON • REGINA • WINNIPEG • TORONTO • MISSISSAUGA • MONTREAL • QUEBEC • BARRABEN

UNIVAR

ACETONE / ACÉTONE

Danger

Highly flammable liquid and vapour.

Cause serious eye irritation.

May cause drowsiness or dizziness.

Precautions:

Keep away from heat, hot surfaces, open flames, sparks. No smoking.

Keep container tightly closed.

Take precautionary measures against static discharge.

Use only outdoors or in a well-ventilated area.

Wear eye protection, face protection, protective clothing, protective gloves.

Avoid breathing mist, spray, vapours.

IF INHALED: Remove person to fresh air and keep comfortable.

Danger

Liquide et vapeur très inflammable.

Cause une irritation oculaire grave.

Peut provoquer la somnolence ou le vertige.

Conseils:

Tenir à l'écart de la chaleur, des surfaces chaudes, flammes et étincelles. Ne pas fumer.

Garder le récipient bien fermé.

Protéger contre les décharges électrostatiques.

Utiliser uniquement à l'extérieur ou dans un endroit bien aéré.

Porter des lunettes de protection, appareil de protection du visage, et des vêtements et gants de protection.

Éviter de respirer la buée, l'aérosol et les vapeurs.

EN CAS D'INHALATION: Transporter la personne contaminée à l'air frais et la garder confortable.

Rappter Chemicals Ltd., 1234 Jurassic Court, Moose Jaw, SK,

S6H 3J8

career1 WHMIS 2015 supplier labels

Supplier labels must be bilingual (English/French), easy to read and durable.
The pictogram(s), signal word and hazard statement(s) must be grouped together on a supplier label.

The label must contain the following information:

1. Product identifier
2. Hazard pictograms
3. Signal word
4. Hazard statements
5. Precautionary statements
6. Supplier identifier

Note: The information on the supplier label should match the information listed in section 2 of the SDS.

1 Product K1 / Produit K1	
2  	
Danger 3 Fatal if swallowed. Causes skin irritation.	Danger Mortel en cas d'ingestion. Provoque une irritation cutanée.
Precautions: Wear protective gloves. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.	Conseils : Porter des gants de protection. Se laver les mains soigneusement après manipulation. Ne pas manger, boire ou fumer en manipulant ce produit.
Store locked up. Dispose of contents/containers in accordance with local regulations.	5 Garder sous clef. Éliminer le contenu/récipient conformément aux règlements locaux en vigueur.
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.	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 Labels

Use a workplace label when you:

1. Transfer material from a supplier labeled container to another container
2. Replace a damaged supplier label
3. When the product is produced in the workplace

Workplace Labels

It is anticipated that a workplace label will require the following information:

- 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).

Workplace label requirements fall under provincial or territorial jurisdiction, or under the Canada Labour Code if you work in a federally regulated workplace.

WHMIS 2015 Training



- An example of a damaged label that needs to be replaced by the workplace.

What Should I Do with a Hazardous Product



- Always check to see if there is a label on the product before you use it
- Read, understand and follow the instructions on the label and SDS. Follow any additional education, instructions, and training as provided by your employer.
- Ask your supervisor if you are not sure about how to use or store it.
- Ask for a new label when the old one cannot be seen or read properly.
- Do not use a product that is not labeled or if the label is unreadable. Ask your supervisor for help (e.g., to replace the label).

Symbol Meanings

Old



New



• Class A - Compressed Gas

- Any material that is normally a gas placed under pressure or chilled, and contained by a cylinder is considered to be a compressed gas. They are dangerous because they are under pressure. The container can 'rocket' or 'torpedo' at great speeds if broken. This is a danger to anyone standing too close. If the cylinder is heated (by fire or rise in temperature), the gas may try to expand and the cylinder will explode. Leaking cylinders are also a danger because the gas that comes out is very cold and it may cause frostbite if it touches your skin e.g. carbon dioxide or propane). Common examples include: compressed air, carbon dioxide, propane
- , oxygen, ethylene oxide, and welding gases. The hazard symbol is a picture of a cylinder or container of compressed gas surrounded by a circle.
- Additional dangers may be present if other properties contain, for example, propane. It is both a compressed gas and it burns easily. Propane would have two hazard symbols - one for a compressed gas and another as a flammable material.

Class B - Flammable and Combustible Material?

Old



New



- Examples of Class B Materials Include propane, paints and solvents, and certain types of fuel. The predominant hazard with materials which display this symbol is the potential for fires. Not only can fire burn you, but it can also rob a space of its critical oxygen content which you require to stay alive. These chemicals may create vapours and fumes when burning, which can also be damaging to your health.

Class C - Oxidizing Materials?

Old



New



- Oxidizing materials can potentially cause fires if they were to come in contact with combustible materials.
- Examples of Class C Materials include oxygen, bleach, and hydrogen peroxide. The primary hazard associated with oxidizers is their ability to act as an oxygen source; therefore, they can stimulate the combustion of certain materials such as wood and paper.

Class D1 – Acute Toxicity

Old



New



- These are materials that are poisonous and immediately dangerous to life and health. Serious health effects such as burns, loss of consciousness, coma or death within just minutes or hours after exposure are grouped in this category. Most D-1 materials will also cause longer term effects as well (those effects that are not noticed for months or years). Examples of some D-1 materials include carbon monoxide, sodium cyanide, sulphuric acid, toluene-2,4-diisocyanate (TDI), and acrylonitrile. The symbol for Class D - Division 1 (D-1) is a skull and crossed bones inside a circle

Class D2 - Poisonous and Infectious materials

Old



New



Division 2 of Class D has two subclasses called D2A (very toxic) and D2B (toxic). While it is not a legal requirement for the WHMIS sub-classification to be reported on the Material Safety Data Sheet (MSDS) nor is it a requirement for classes D2A or D2B to be distinguished on the label, it is often possible to make this distinction using the health hazard information on the label and/or the MSDS. Note that the “T” symbol has been replaced by two others, being more reflective of the two types of hazards.

Acute toxicity – Oral, Dermal, Inhalation; Skin corrosion/irritation – Skin irritation; Reproductive toxicity; Specific Target Organ Toxicity - Single exposure or Repeated exposure

Respiratory or skin sensitization; can change the germ cell DNA; carcinogenicity (carcinogen is a leading cause of cancer); reproductive toxicity; targets specific organ with single or repeated exposure; Aspiration (breathing) toxicity

Biohazardous Infectious Materials

This symbol has
not changed



This symbol is to warn people of biohazardous infectious materials. Some examples include: human and animal blood, tissues, and certain body fluids. In more layman terms, biohazardous waste is any waste contaminated with potentially infectious materials

Class E - Corrosive Material



Corrosive is the name given to materials that can cause severe burns to skin and other human tissues such as the eye or lung, and can attack clothes and other materials including metal.

Corrosives are grouped in this special class because their effects are permanent. Common corrosives include acids such as sulphuric and nitric acids, bases such as ammonium hydroxide and caustic soda and other materials such as ammonia, chlorine, and nitrogen dioxide. The symbol for a corrosive is a picture of two test tubes pouring liquid on a bar (piece of metal) and a hand with lines coming off of them inside a circle



Class F - Dangerously Reactive Materials



A material is considered to be dangerously reactive if it shows three different properties or abilities: first, if it can react very strongly and quickly (called "vigorously") with water to make a toxic gas; second, if it will react with itself when it gets shocked (bumped or dropped) or if the temperature or pressure increases; and thirdly, if it can vigorously join to itself (polymerization), break down (decomposition) or lose extra water such that it is a more dense material (condensation). If a material is dangerously reactive, it will most likely be described as "unstable". Most of these materials can be extremely hazardous if they are not handled properly because they can react in such a quick manner very easily. Examples of these products are ethyl acrylate, vinyl chloride, ethylene oxide, picric acid and anhydrous aluminum chloride. The old symbol is a picture of a test tube with sparks or lines coming out of the tube surrounded by a letter "R" inside a circle. In the new WHMIS, they are depicted by both the exploding bomb or the fire symbol.



















New Symbols





These two symbols were included in the 2015 version of WHMIS.



1988/2015 Comparison

WHMIS 1988 Hazard Class	WHMIS 1988 Symbols	WHMIS 2015 Symbol(s)	WHMIS 2015 Hazard Class
A			Gases Under Pressure
B1 to B6			Flammables, Self-Heating, Emit Flammable Gases, Pyrophoric Gases, Liquids & Solids Organic Peroxides
C			Oxidizing Gases, Liquids, Solids
D1			Acute Toxicity - Oral, Dermal, Inhalation
D2			Eye Irritation, Skin Irritation Skin/Respiratory Sensitization, Carcinogenicity Mutagenicity Reproductive Hazards
D3			Biohazardous Infectious Materials
E			Skin/Eye Corrosion Corrosive to Metals
F			Self-Reactive Substances Organic Peroxides
N/A	N/A		Explosive Substances (Explosives are still covered under WHMIS exclusions for now)
N/A	N/A		Aspiration, STOT (Single Exposure, Repeated Exposure)

Note that the 1988 symbols are a different shape 
The old symbols were a circle shape and were black. The 2015 version is red and is diamond shaped 
There are also extra symbols from the previous ones. Note that the Biohazard symbol has remained the same for both.