

WHMIS

Participant Workbook



MATERIAL SAFETY DATA SHEET – 9 Sections

1 – PRODUCT INFORMATION

Acetone

general-purpose cleaning of adhesives, contact cements, printing inks

Happy Chemical Company

5556 Helium Lane

Province BC

City Vapour Town

Postal Code X5X 5X5

Supplier's Name

Street Address 123 Nitro Avenue

Province BC

Emergency Telephone (604) 234-5678

Emergency Telephone

HAZARDOUS INGREDIENTS

Ingredients (specify)

WORK SAFE BC

WORKING TO MAKE A DIFFERENCE
worksafebc.com

WCB PUBLICATIONS

Many publications are available on the WCB web site. The Occupational Health and Safety Regulation and associated policies and guidelines, as well as excerpts and summaries of the *Workers Compensation Act*, are also available on the web site: <www.worksafebc.com>

Some publications are also available for purchase in print:

Phone: 604 232-9704

Toll-free phone: 1 866 319-9704

Fax: 604 232-9703

Toll-free fax: 1 888 232-9714

Online ordering: <www.worksafebc.com> and click on Publications; follow the links for ordering

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If any conflict exists between this material and current WHMIS legislation or related policies, the legislation and policies shall take precedence.

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ABOUT THE WCB

The Workers' Compensation Board is an independent provincial statutory agency governed by a Board of Directors. It is funded by insurance premiums paid by registered employers and by investment returns. In administering the *Workers Compensation Act*, the WCB remains separate and distinct from government; however, it is accountable to the public through government in its role of protecting and maintaining the overall well-being of the workers' compensation system.

The WCB was born out of a compromise between B.C.'s workers and employers in 1917 where workers gave up the right to sue their employers or fellow workers for injuries on the job in return for a no-fault insurance program fully paid for by employers. The WCB is committed to a safe and healthy workplace, and to providing return-to-work rehabilitation and legislated compensation benefits to workers injured as a result of their employment.

WCB PREVENTION INFORMATION LINE

The WCB Prevention Information Line can answer your questions about workplace health and safety, worker and employer responsibilities, and reporting a workplace accident or incident. The Prevention Information Line accepts anonymous calls.

Phone 604 276-3100 in the Lower Mainland, or call 1 888 621-7233 (621-SAFE) toll-free in British Columbia.

To report after-hours and weekend accidents and emergencies, call 604 273-7711 in the Lower Mainland, or call 1 866 922-4357 (WCB-HELP) toll-free in British Columbia.

WHMIS Participant Workbook

WELCOME TO THE WHMIS INSTRUCTION PROGRAM.

This program will cover the basics of WHMIS education.

The video presentation has five parts:

- Overview
- Classification
- Labels
- MSDS
- Education/Implementation

Your workbook is designed to help you learn the information in the video program with three features:

- A brief summary of each part of the video
- Space to add your own notes from class discussion
- Review exercises

When the instruction session is finished, keep this workbook for reference. You can also find information in the *WHMIS at Work* booklet.

The overall purpose of WHMIS is to help ensure a safer, healthier workplace. Your knowledge about the workplace is your biggest asset in successfully understanding and benefiting from WHMIS.

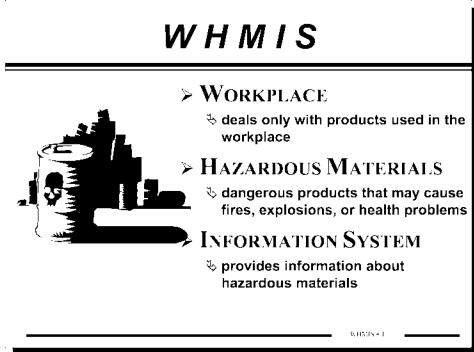
DO NOT HESITATE TO ASK QUESTIONS.

Overview of WHMIS

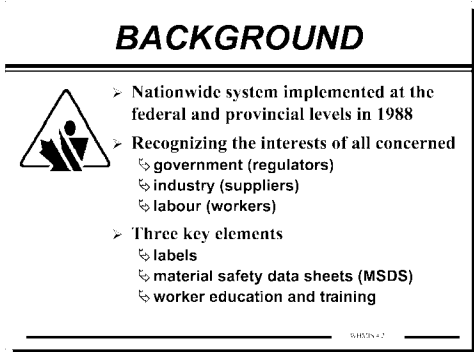
WHMIS DEVELOPMENT

The purpose of WHMIS is to reduce injuries or diseases caused by exposure to hazardous materials used in the workplace.

Every person working with or near controlled products has the right to know the hazards and how to safely use the products.



WHMIS is a response to Canadian workers' right to know more about the health and safety hazards of materials used in the workplace. It has been in effect since October 31, 1988. The system provides workers and employers with vital information about hazardous materials.



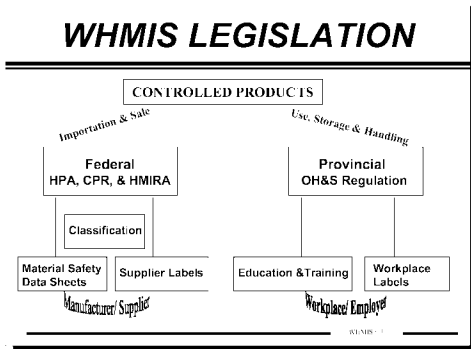
HAZARDOUS MATERIALS

Hazardous materials are called **controlled products**. Exposure to hazardous materials can result in health problems such as irritation of the eyes, sensitization of the skin or lungs, heart ailments, kidney and lung damage or cancer. Hazardous materials can cause fires, explosions, or other accidents when improperly stored or handled.

LEGISLATION

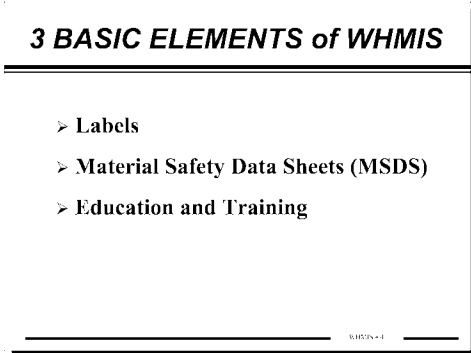
Federal Legislation (*Hazardous Products Act* and *Controlled Products Regulations*) deals with importation and sale of controlled products. The *Hazardous Materials Information Review Act* established a commission to review claims for trade secrets.

Provincial Legislation (*OHS Regulation*) covers the use of hazardous materials in the workplace.



WHMIS ELEMENTS

Labels, Material Safety Data Sheets (MSDSs) and worker education and training are the three communication elements of WHMIS.



KEY WHMIS PARTICIPANTS

The key WHMIS participants are **suppliers, employers, and workers.**

PARTICIPANTS

➤ **SUPPLIERS**

- ↳ classify all controlled products
- ↳ supply proper labels and MSDS
- ↳ keep information on labels and MSDS current

➤ **EMPLOYERS**

- ↳ educate and train workers
- ↳ provide safe work procedures
- ↳ ensure availability of proper up-to-date labels and MSDS

➤ **WORKERS**

- ↳ understand content and significance of labels and MSDS
- ↳ follow safe work procedures
- ↳ notify employers about problems with labels and MSDS

Overview Exercises

- 1) WHMIS is the W _____ H _____ M _____ I _____ S _____.
- 2) Hazardous materials are referred to as _____ products in the *Hazardous Products Act*.
- 3) Three key elements of WHMIS information system are _____, _____, and _____.
- 4) The three main WHMIS participants are the _____, the _____, and _____.


Classification

Classification determines if a product falls within one or more of the hazard classes.

CLASSES AND SYMBOLS

WHMIS covers six classes of controlled products, that are lettered A through F. Eight hazard symbols are used for these different classes.


**CLASS A
COMPRESSED GASES**



- Products under pressure
 - ↳ butane, propane, acetylene, and fire extinguishers

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**CLASS B
FLAMMABLE/ COMBUSTIBLE MATERIALS**



- Substances capable of catching fire or exploding
 - ↳ acetone, isopropyl alcohol, stoddart solvent

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**CLASS C
OXIDIZERS**



- Products causing/ contributing to the combustion of other materials
 - ↳ hydrogen peroxide, potassium nitrate, sodium chlorate

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**CLASS D
POISONOUS AND INFECTIOUS (D1)**



- Materials causing immediate and serious toxic effect
 - ↳ arsenic, methylene chloride, and formaldehyde

W1054.1

**CLASS D
POISONOUS AND INFECTIOUS (D2)**



- Materials causing other toxic effect
 - immediate skin or eye irritation
 - chronic health effects on body organs, cardiovascular or nervous system
 - ↳ e.g., carcinogens (crystalline silica), sensitizers (methyl methacrylate), embryotoxin (xylene)

W1054.2

**CLASS D
POISONOUS AND INFECTIOUS (D3)**



- Biohazardous infectious materials
 - harmful microorganisms
 - ↳ Classified as Risk Groups II, III, or IV as defined by the Medical Research Council of Canada
 - ↳ Includes commercial cultures containing infectious organisms such as HIV, Ebola, and Hepatitis B

W1054.3

**CLASS E
CORROSIVE MATERIALS**



- Materials such as caustics or acids causing burns to skin or eyes
- ☞ sodium hydroxide, hydrochloric acid, and hydrofluoric acid

WHMIS 1

**CLASS F
DANGEROUSLY REACTIVE MATERIALS**



- Products which can undergo dangerous reaction if subject to heat, light, pressure, shock, water, air
- ☞ hydrogen cyanide, benzoyl peroxide, chlorine dioxide

WHMIS 2

EXEMPTIONS

Partially Exempt

Some products are already covered by other labelling legislation and do not require WHMIS labels and MSDSs. However, Provincial legislation requires employers to educate and train workers about the hazards of partially exempt products and in safe work procedures, and to use workplace labels.

PARTIALLY EXEMPT

No WHMIS Supplier Label and MSDS Required
EDUCATION & TRAINING AND WORKPLACE LABELS REQUIRED

- SOME CONSUMER PRODUCTS
- COSMETICS
- FOOD AND DRUGS
- MEDICAL DEVICES
- RADIOACTIVE SUBSTANCES
- PESTICIDES
- EXPLOSIVES

WHMIS 3

Completely Exempt

Some products are completely exempt from both Federal and Provincial WHMIS requirements. However, workers must be trained in safe handling procedures, as required under occupational health and safety regulations.

COMPLETELY EXEMPT









None of the WHMIS Requirements
OH&S REGULATIONS APPLY

- WOOD, AND PRODUCTS MADE OF WOOD
- MANUFACTURED ARTICLES
- TOBACCO AND TOBACCO PRODUCTS
- HAZARDOUS WASTES
- GOODS HANDLED UNDER TDG
 - ↳ hazardous materials in transport

WHMIS - 4

Classification Exercises

- 1) _____ are responsible for classifying all controlled products that are imported into or sold in Canada.
- 2) Match the hazard symbol to the hazards.

WHMIS Hazard Class Exercise	
Hazard Symbol	Hazards
	1) Caustics or acids which can destroy skin or eat metals.
	2) Capable of catching fire or exploding in the presence of an ignition sources.
	3) Can undergo dangerous reactions with heat, pressure, impact, or contact with water.
	4) Provide oxygen which can increase the risk of fire.
	5) Contain harmful microorganisms.
	6) Can cause death of a person exposed to small amounts.
	7) Can cause immediate skin or eye irritation or long-term health effects.
	8) Can explode if exposed to heat or impact.

- 3) As an in-class inventory, list and classify some products in your workplace that fall under WHMIS information requirements.

Labels

WHMIS LABELS

The purpose of labels is to alert workers to the main hazards of controlled products and provide instructions for safe handling, and to direct workers to the MSDS for more information.

The two types of WHMIS labels are the **supplier label** and the **workplace label**. **Other means of identification** may be used where appropriate (such as warning signs, colour codes, placards).

WHMIS LABELS

- All WHMIS controlled products must be labelled.
- There are 2 types of WHMIS Labels
 - ↳ Supplier Labels
 - ↳ Workplace Labels
- Other means of identification
 - ↳ placards, warning signs, colour codes
- Labels alert workers to hazards and safe handling instructions

SUPPLIER LABEL

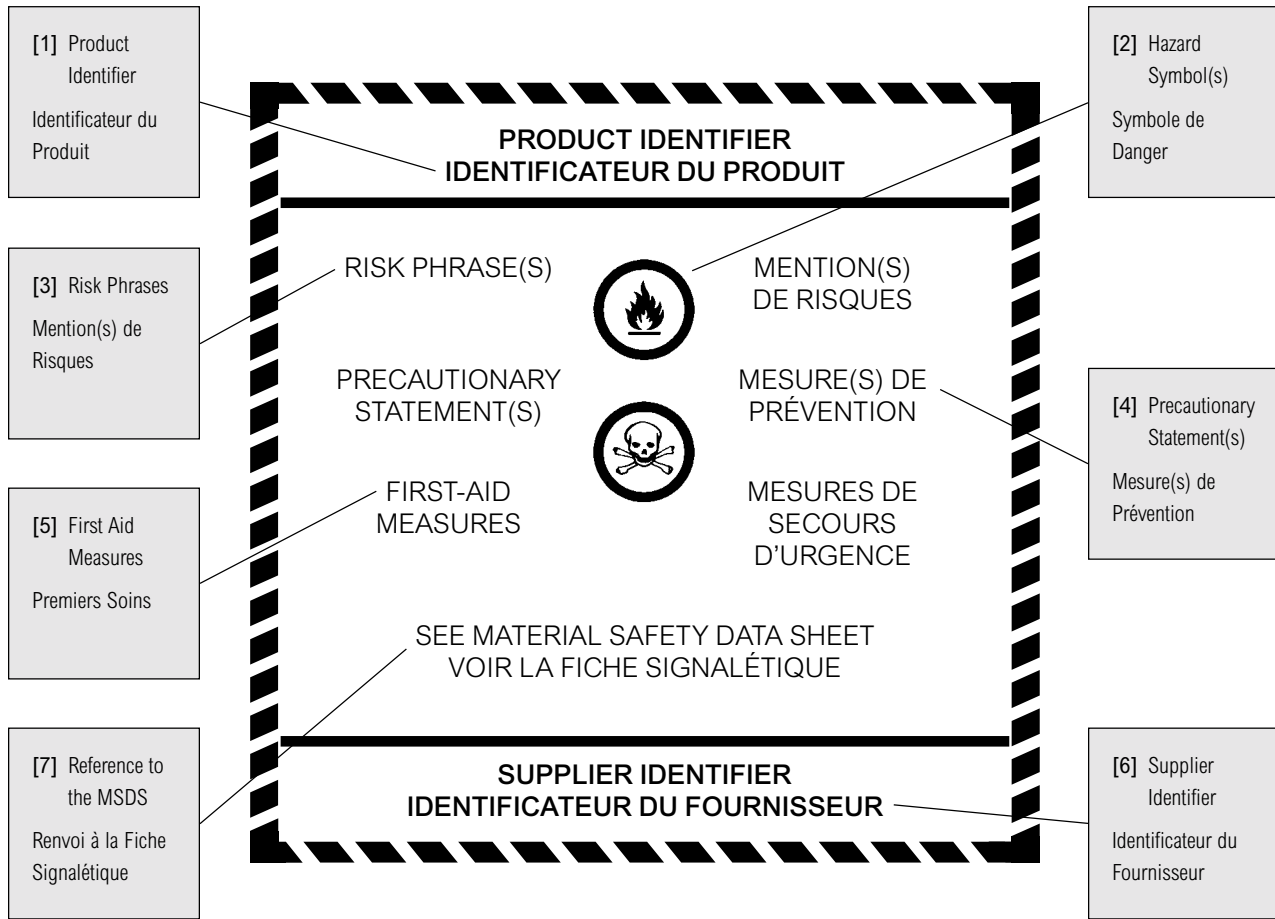
Suppliers must provide supplier labels on containers of all controlled products sold or imported for use in the workplace.

Supplier labels will show seven types of information in both English and French within a distinctive hatched border.

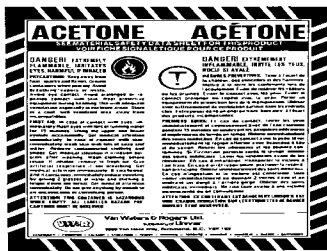
SUPPLIER LABEL

- Contains the following
 - ↳ Product name
 - ↳ Hazard symbols
 - ↳ Risk phrases
 - ↳ Precautionary measures
 - ↳ First aid measures
 - ↳ Supplier identifier
 - ↳ Reference to MSDS
- All information must be disclosed in English and French within a hatched border

ACCEPTABLE FORMAT FOR THE SUPPLIER LABEL



SUPPLIER LABEL EXAMPLE



WORKPLACE LABELS

Workplace labels are required on containers of controlled products produced on site, and on secondary containers where the product has been transferred from the original container.

WORKPLACE LABEL

- > Applied to
 - ↳ secondary containers
 - ↳ containers of products received in bulk
 - ↳ employer-produced products
 - ↳ containers with missing or illegible supplier labels
- > Contains the following
 - ↳ Product name
 - ↳ Safe handling procedures
 - ↳ Reference to the MSDS

WHS 5011

WORKPLACE LABEL EXAMPLE

ACETONE

Flammable

- Keep away from heat, sparks, and flames
- Wear butyl rubber gloves and safety goggles.
- Use with local exhaust ventilation.

Material Safety Data Sheet Available

WHS 5011

OTHER MEANS OF IDENTIFICATION

Other means of identification may be used where labels are impractical.

OTHER IDENTIFIERS

- > Warning signs
- > Color/ number coding systems
- > Symbols

For identifying:

- ↳ products not in a container
- ↳ hazardous waste produced in the workplace
- ↳ piping systems, reaction vessels, tank cars, conveyor belts carrying a controlled product

WHS 5011

Note: If you are a laboratory worker, some specific labelling requirements apply. Discuss these with your instructor.

Labelling Requirement for Small Containers and Laboratory Chemicals

Information Item	Small Container (< 100 mL)	Laboratory Supply House (< 10 kg)	Laboratory Sample (< 10 kg)
1) Product Identifier	✓	✓	✓
2) Chemical Identity			✓
3) Hazard Symbol(s)	✓		
4) Risk Phrases		✓	
5) Precautionary Measures		✓	
6) First Aid Measures		✓	
7) Supplier Identifier	✓		✓
8) Reference to MSDS	✓	✓	
9) Emergency Phone Number			✓
10) Hatched Border	✓		✓
11) English and French	✓	✓	✓

Label Exercises

1) What is the purpose of a WHMIS label?

2) What are the two types of WHMIS labels?

3) Review and identify the seven types of information on a supplier label from your workplace.

a) _____

b) _____

c) _____

d) _____

e) _____

f) _____

g) _____

4) Identify the three types of information on this workplace label.

Solv-easy
Extremely flammable.
Keep away from sparks, heat, and open flame.
Use local exhaust ventilation or NIOSH-approved organic vapour respirator.
Wear neoprene gloves and chemical splash goggles.
See the MSDS.

5) Name two situations where other means of identification can be used.

a) _____

b) _____

6) As an in-class exercise, choose a WHMIS-controlled product from your workplace, and develop a workplace label for that product.

Laboratory Label Exercises

(FOR LAB WORKERS)

- 1) Supplier labels for controlled products from laboratory supply houses do not need the distinctive border, _____, or _____ if they are packaged in less than 10 kilogram quantities and intended for use in a laboratory.
- 2) Laboratory supply houses must provide an MSDS for their products, except where the _____ discloses all the information required on the MSDS.
- 3) A laboratory sample usually does not have an MSDS prepared for it. Identify the WHMIS categories required on the label.
- 4) Portable containers filled from supplier containers, as well as products produced in a laboratory for research and development work in the same lab, do not need a workplace label, only _____.

Material Safety Data Sheet (MSDS)

MSDS INFORMATION

The MSDS is a technical bulletin that provides detailed hazard, precautionary, and emergency information about the controlled product. The MSDS must be made available and accessible to workers.

USES of MSDS

- Provides detailed information of the hazards of a controlled product
- An important element for developing safe work procedures and control measures
- A key element of worker education and training

MATERIAL SAFETY DATA SHEET (MSDS)

- A technical document providing information on a controlled product:
 - ↳ hazardous ingredients
 - ↳ hazards (fire, explosion, reactivity)
 - ↳ health effects of exposure (acute and chronic)
 - ↳ hazard evaluation related to storage and handling
 - ↳ measures to protect workers
 - ↳ emergency procedures
- Must be current (no more than 3 years old), complete, and readily available to workers

The *Controlled Products Regulations* list 54 items of information in 9 recommended sections on an MSDS, but does not require a standard format. MSDSs may be in different formats, and sections can be arranged in a different order.

RULES for COMPLETING MSDS

- Must not be more than 3 years old
 - 9 recommended sections
 - 54 items of information
 - Specific hazardous ingredients must be disclosed (No "trade secrets/proprietary" allowed unless a claim has been registered)
 - Any abbreviations used must be defined
 - Information must be specific
 - No blanks
 - No contradictory information
- No Standard Format under WHMIS**

9-SECTION MSDS — SAMPLE FORMAT

A sample format for a 9-section MSDS is shown on the next three pages.

SECTION 1 — Product Information

Product Identifier			WHMIS Classification (<i>optional</i>)		
Product Use					
Manufacturer's Name			Supplier's Name		
Street Address			Street Address		
City		Province	City		Province
Postal Code	Emergency Telephone		Postal Code	Emergency Telephone	

SECTION 2 — Hazardous Ingredients

Hazardous Ingredients (<i>specific</i>)	%	CAS Number	LD ₅₀ of Ingredient (<i>specify species and route</i>)	LC ₅₀ of Ingredient (<i>specify species</i>)

SECTION 3 — Physical Data

Physical State	Odour and Appearance		Odour Threshold (ppm)
Specific Gravity	Vapour Density (air = 1)	Vapour Pressure (mmHg)	Evaporation Rate
Boiling Point (°C)	Freezing Point (°C)	pH	Coefficient of Water/Oil Distribution

SECTION 4 — Fire and Explosion Data

Flammability <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, under which conditions?		
Means of Extinction			
Flashpoint (°C) and Method	Upper Flammable Limit (<i>% by volume</i>)	Lower Flammable Limit (<i>% by volume</i>)	
Autoignition Temperature (°C)	Explosion Data — Sensitivity to Impact	Explosion Data — Sensitivity to Static Discharge	
Hazardous Combustion Products			

Product Identifier:

SECTION 5 — Reactivity Data

Chemical Stability <input type="checkbox"/> Yes <input type="checkbox"/> No	If no, under which conditions?
Incompatibility with Other Substances <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, which ones?
Reactivity, and Under What Conditions?	
Hazardous Decomposition Products	

SECTION 6 — Toxicological Properties

Routes of Entry <input type="checkbox"/> Skin Contact <input type="checkbox"/> Skin Absorption <input type="checkbox"/> Eye Contact <input type="checkbox"/> Inhalation <input type="checkbox"/> Ingestion	
Effects of Acute Exposure to Product	
Effects of Chronic Exposure to Product	
Exposure Limits (<i>value, source, date</i>)	Irritancy (<i>if yes, explain</i>) <input type="checkbox"/> Yes <input type="checkbox"/> No
Sensitization (<i>if yes, explain</i>) <input type="checkbox"/> Yes <input type="checkbox"/> No	Carcinogenicity (<i>if yes, explain</i>) <input type="checkbox"/> Yes <input type="checkbox"/> No
Reproductive Toxicity (<i>if yes, explain</i>) <input type="checkbox"/> Yes <input type="checkbox"/> No	Teratogenicity (<i>if yes, explain</i>) <input type="checkbox"/> Yes <input type="checkbox"/> No
Mutagenicity (<i>if yes, explain</i>) <input type="checkbox"/> Yes <input type="checkbox"/> No	Synergistic Products (<i>if yes, explain</i>) <input type="checkbox"/> Yes <input type="checkbox"/> No

SECTION 7 — Preventive Measures

Personal Protective Equipment <input type="checkbox"/> Gloves <input type="checkbox"/> Respirator <input type="checkbox"/> Eye <input type="checkbox"/> Footwear <input type="checkbox"/> Clothing <input type="checkbox"/> Other	
If checked, specify type	
Engineering Controls (<i>specify, such as ventilation, enclosed process</i>)	
Leak and Spill Procedure	
Waste Disposal	
Handling Procedures and Equipment	
Storage Requirements	
Special Shipping Information	PIN

Product Identifier:

SECTION 8 — First Aid Measures

Inhalation
Ingestion
Skin Contact
Eye Contact

SECTION 9 — Preparation Information

Prepared by (<i>group, department, etc.</i>)	Telephone Number	Preparation Date
--	------------------	------------------

MSDS SECTIONS

The following are the nine recommended section headings and the types of information found in each section:

Product Identification

Product name, product use, and information on how to contact the supplier or manufacturer.

Hazardous Ingredients

Chemical names of the hazardous ingredients, percentages, and the acute toxicity data for each component.

Physical Data

General information on physical properties of the product (e.g. specific gravity, boiling point, evaporation rate).

Fire and Explosion Data

Conditions under which the product may catch fire or explode, and the means of extinction.

Reactivity Data

Conditions and other substances that should be avoided to prevent dangerous reactions.

Toxicological Properties

Identifies how the substance enters the body and what the short- and long-term health effects are.

Preventive Measures

Information on control measures including ventilation, personal protective equipment, and work procedures.

First Aid Measures

Specific instructions for immediate treatment in case of injury or illness.

Preparation Information

Lists who prepared the MSDS and when.

TRADE SECRETS

Suppliers and employers may apply to the Hazardous Materials Information Review Commission to withhold certain types of information.

CONFIDENTIAL BUSINESS INFORMATION
<ul style="list-style-type: none">> Suppliers and employers may apply for trade secret protection to:<ul style="list-style-type: none">↳ Hazardous Materials Information Review Commission> Approved claim is valid for 3 years> Protected trade information is only released to medical personnel in case of a medical emergency for treatment> Health hazard information must be disclosed on MSDS

MSDS Exercises

1) Where are the MSDSs kept in your workplace?

2) How often must an MSDS be updated?

3) How many items of information are required on an MSDS?

4) Define acute and chronic exposure?

5) Using an MSDS for a product in your workplace: review the hazards of the product, the safe handling procedures, personal protective equipment, storage and shipping requirements for the product.

9-SECTION MSDS CHECKLIST

Review of 54 Items Required by *Controlled Products Regulations (Schedule I)*

Product Identifier: _____

- = information present as required
- = information inaccurate or missing
- N/AP = information not applicable
- N/AV = information not available
- [] = optional information (not required by *CPR*)

[WHMIS Class(es)]:



INFORMATION TO BE DISCLOSED ON AN MSDS

COMMENTS

SECTION 1 — Product Information

<input type="checkbox"/> Product Identifier, [WHMIS Classification]	
<input type="checkbox"/> Product Use	
<input type="checkbox"/> Manufacturer's Name, Street Address, City, Province/State, Postal/Zip Code, Emergency Telephone, [Fax Number]	
<input type="checkbox"/> Supplier's Name, Street Address, City, Province/State, Postal/Zip Code, Emergency Telephone, [Fax Number]	

SECTION 2 — Hazardous Ingredients

Hazardous Ingredients <i>(specific)</i>	%	CAS Number	LD ₅₀	LC ₅₀	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

SECTION 3 — Physical Data

<input type="checkbox"/> Physical State (gas, liquid, or solid)	
<input type="checkbox"/> Odour and Appearance	
<input type="checkbox"/> Odour Threshold (ppm)	

Product Identifier:

INFORMATION TO BE DISCLOSED ON AN MSDS

COMMENTS

<input type="checkbox"/> Specific Gravity	
<input type="checkbox"/> Vapour Density (air = 1)	
<input type="checkbox"/> Vapour Pressure (mmHg)	
<input type="checkbox"/> Evaporation Rate	
<input type="checkbox"/> Boiling Point (°C)	
<input type="checkbox"/> Freezing Point (°C)	
<input type="checkbox"/> pH	
<input type="checkbox"/> Coefficient of Water/Oil Distribution	

SECTION 4 — Fire and Explosion Data

<input type="checkbox"/> Conditions of Flammability	
<input type="checkbox"/> Means of Extinction	
<input type="checkbox"/> Flashpoint (°C) and Method of Determination (open-cup or closed-cup)	
<input type="checkbox"/> Upper Flammable Limit (% by volume)	
<input type="checkbox"/> Lower Flammable Limit (% by volume)	
<input type="checkbox"/> Autoignition Temperature (°C)	
<input type="checkbox"/> Explosion Data — Sensitivity to Impact	
<input type="checkbox"/> Explosion Data — Sensitivity to Static Discharge	
<input type="checkbox"/> Hazardous Combustion Products	

SECTION 5 — Reactivity Data

<input type="checkbox"/> Conditions Under which the Product is Chemically Unstable	
<input type="checkbox"/> Name of Any Substance or Class of Substance with which the Product is Incompatible	
<input type="checkbox"/> Conditions of Reactivity	
<input type="checkbox"/> Hazardous Decomposition Products	

Product Identifier:

INFORMATION TO BE DISCLOSED ON AN MSDS

COMMENTS

SECTION 6 — Toxicological Properties

<input type="checkbox"/> Routes of Entry <input type="checkbox"/> Skin Contact <input type="checkbox"/> Skin Absorption <input type="checkbox"/> Eye Contact <input type="checkbox"/> Inhalation <input type="checkbox"/> Ingestion	
<input type="checkbox"/> Effects of Acute Exposure to Product	
<input type="checkbox"/> Effects of Chronic Exposure to Product	
<input type="checkbox"/> Exposure Limits (<i>value, source, date</i>) <input type="checkbox"/> ACGIH <input type="checkbox"/> OSHA <input type="checkbox"/> Other	
<input type="checkbox"/> Irritancy of Product	
<input type="checkbox"/> Sensitization of Product	
<input type="checkbox"/> Carcinogenicity <input type="checkbox"/> IARC (<i>1, 2A, or 2B</i>) <input type="checkbox"/> ACGIH (<i>A1, A2, or A3</i>)	
<input type="checkbox"/> Reproductive Toxicity	
<input type="checkbox"/> Teratogenicity	
<input type="checkbox"/> Mutagenicity	
<input type="checkbox"/> Name of Toxicologically Synergistic Products	

SECTION 7 — Preventive Measures

<input type="checkbox"/> Specific Personal Protective Equipment <input type="checkbox"/> Gloves <input type="checkbox"/> Respirator <input type="checkbox"/> Eye <input type="checkbox"/> Footwear <input type="checkbox"/> Clothing <input type="checkbox"/> Other	
<input type="checkbox"/> Specific Engineering Controls To Be Used <input type="checkbox"/> General <input type="checkbox"/> Local Exhaust <input type="checkbox"/> Other (<i>specify</i>)	
<input type="checkbox"/> Leak and Spill Procedure	

Product Identifier:

INFORMATION TO BE DISCLOSED ON AN MSDS

COMMENTS

SECTION 7 — Preventive Measures (continued)

<input type="checkbox"/> Waste Disposal	
<input type="checkbox"/> Handling Procedures and Equipment	
<input type="checkbox"/> Storage Requirements	
<input type="checkbox"/> Special Shipping Information	
<input type="checkbox"/> PIN	

SECTION 8 — First Aid Measures

<input type="checkbox"/> Specific First Aid Measures <input type="checkbox"/> Inhalation	
<input type="checkbox"/> Ingestion	
<input type="checkbox"/> Skin Contact	
<input type="checkbox"/> Eye Contact	

SECTION 9 — Preparation Information

<input type="checkbox"/> Prepared by (<i>group, department, etc.</i>)	
<input type="checkbox"/> Telephone Number	
<input type="checkbox"/> Preparation Date (<i>original date or date of last review</i>)	

WHMIS Implementation

WHMIS PROGRAM

The WHMIS program will be specific to the workplace, but the major elements of the program will be similar to the checklist shown below.

The health and safety committee or representative must be involved in the program development, implementation, and review.

The employer must use WHMIS information (MSDS, label) and other workplace knowledge to develop written safe work procedures and emergency procedures.

The workers must be educated about the hazards and trained in safe work procedures.

WHMIS PROGRAM	
<input type="checkbox"/> Assign responsibility	
<input type="checkbox"/> Establish inventory of controlled products	
<input type="checkbox"/> Meet MSDS/label requirements	
<input type="checkbox"/> Determine hazards of controlled products	
<input type="checkbox"/> Establish workplace controls	
<input type="checkbox"/> Establish emergency procedures	
<input type="checkbox"/> Provide worker education and training	
<input type="checkbox"/> Evaluate WHMIS program	

EDUCATION AND TRAINING

Employers are responsible for educating workers about WHMIS and training workers in safe work procedures.

WHO NEEDS WHMIS EDUCATION AND TRAINING?	
➤ Workers who work with controlled products	
➤ Workers who work in proximity to controlled products, including	
↳ management	
↳ supervisors, and	
↳ first aid/ emergency personnel	

WORKER EDUCATION

An employer must ensure that general WHMIS education is provided to worker on:

- major hazards of controlled products in use at the workplace
- rights and responsibilities
- content required on labels and MSDS, and the significance of this information
- elements of the WHMIS program

WHS 15.1.1

WORKER TRAINING

An employer must ensure instruction in

- specific procedures
 - ↳ for the safe use, storage, handling and disposal of a controlled product
 - ↳ to follow in case of an escape of a controlled product
 - ↳ to follow in an emergency involving a controlled product
- safe use, storage, handling and disposal of a controlled product in transit, e.g., in a pipe

WHS 15.1.2

EDUCATION AND TRAINING ASSESSMENT

Is the trainee able to answer these questions?



- ↳ What are the hazards of the product?
- ↳ How do I protect myself?
- ↳ What should I do in case of an emergency?
- ↳ Where do I obtain more information?

WHS 15.1.3

Implementation Exercise

1) Why is it important to assign responsibility for implementation of the WHMIS program?

2) In what ways is the Occupational Safety and Health Committee or Representative expected to be involved in the WHMIS program of instruction?

3) Is watching a video WHMIS training?

4) Take a product from your workplace and answer these four questions:

- What are the hazards of the product?
- How do you protect yourself?
- What do you do in the event of a spill?
- Where can you get more information?

Notes

Notes

Notes

SECTION 6 - TOXICOLOGICAL PROPERTIES

Product Identifier: Acetone

Route of Entry: Skin Contact Skin Absorption Eye Contact Inhalation Ingestion

Effects of Acute Exposure to Product: Irritation; possible effects on central nervous system (CNS); at air concentrations above 8,000 ppm may cause drowsiness, incoordination, loss of reflexes, unconsciousness, and respiratory failure

Effects of Chronic Exposure to Product: Dermatitis. No significant harmful effects from oral or inhalation exposures.

Exposure Limits (value, source, date): 250 ppm, 8-hour exposure limit (WCB)

Sensitization (if yes, explain): Yes No

Reproductive Toxicity (if yes, explain): Yes No

Mutagenicity (if yes, explain): Yes No

Irritancy (if yes, explain): Yes No Severe eye irritant, skin and respiratory irritant

Carcinogenicity (if yes, explain): Yes No

Teratogenicity (if yes, explain): Yes No

Synergistic Products (if yes, explain): Yes No Chlorinated solvents, ethyl alcohol

SECTION 7 - PREVENTIVE MEASURES

Personal Protective Equipment: Eye Footwear Clothing Other

If checked, specify type: Eye Respirator Gloves

Engineering Controls (specify, such as ventilation, enclosed process): Butyl rubber gloves. NIOSH-approved respirator with organic vapour cartridge for air concentrations up to 2,500 ppm. Splash-proof chemical safety goggles or face shield.

Spill Procedure: grounded ventilation system. Use mechanical ventilation to reduce exposure. Use non-sparking and material and place in a suitable covered and labelled container for disposal. Contain spill with absorbent material and dispose in a well-ventilated area, away from heat and all ignition sources (including electrical equipment).

Disposal: Check with federal, provincial, and local government requirements for disposal.

SECTION 2 - HAZARDOUS INGREDIENTS

Product Name: Solvent

Product Use: Solvent

Manufacturer: Gase

Street Address: Gase

City: Gase

Postal Code: Gase