

W.H.M.I.S.

Information Guide



The Winnipeg School Division
1577 Wall Street East
Winnipeg, MB R3E 2S5

If you have any questions with respect to WHMIS or any controlled product contact the following:

- Your Administrator/Supervisor
- Your Workplace Safety and Health Representative
- Workplace Safety and Health Officer
- A Workplace Safety and Health Committee Member

Roles and Responsibilities

Employers

- Ensure a safe and healthy workplace.
- Ensure that all controlled products in the workplace have M.S.D.S. and labels.
- Provide effective worker training.

Workers

- Carry out safe work practices.
- Read labels and M.S.D.S. sheet for controlled products you are working with.
- Inform employers of damaged or missing labels.

Workplace Safety and Health Committee

- Assist with W.H.M.I.S. implementation.
- Answer employee questions about W.H.M.I.S.
- Help review and revise worker education programs.

W.H.M.I.S.: Rationale and key elements

The Workplace Hazardous Material Information System (WHMIS) is a nationwide system to provide information on hazardous materials used in the workplace. WHMIS recognizes the interest of workers, employers, suppliers and regulators, balancing the worker's right to know with industry's right to protect confidential business information.

Exposure to hazardous material can cause or contribute to a variety of health effects such as irritation, burns, sensitization, heart ailments, kidney and lung damage and cancer. Some materials may also be safety hazards that can contribute to fires, explosions and other accidents if improperly stored or handled.

WHMIS is, at heart, a system of information delivery with three key elements:

- Labels on hazardous materials and their containers which alert employers and workers to the dangers of products and basic safety precautions;
- Material Safety Data Sheets (MSDS) — technical bulletins which provide detailed hazard and precautionary information on the product; and
- Worker Education Programs which provide instruction on hazards and training in work procedures.

WHMIS also includes mechanisms for ruling on claims by suppliers and employers for the right to withhold product information from labels and MSDS's for reasons of confidential business information (trade secrets) and for appeals to these rulings.

Section 6

This section provides information on how a material is likely to enter the body and what short - and long-term health effects it is likely to have on an exposed worker, including signs and symptoms of exposure and preexisting medical conditions which may be aggravated. Information in this section is an important determinant of preventive and first aid measures in Sections 7 and 8.

Section 7

The intent of this section is to provide, on the basis of information in Sections 1 - 6, clear direction for the provision of measures to protect worker health and safety during the transportation, storage, use and disposal of the product, as well as emergency procedures related to accidental release. Information must be as specific as possible to ensure proper implementation of workplace health and safety programs. Employers must adapt information from data sheets to the specific hazard circumstances of each workplace.

Section 8

The intent of this section is primarily to provide information necessary for the safe evacuation and immediate treatment of a person experiencing acute effects of overexposure to the controlled product. Information is meant for use by workers on site, including first aid personnel, and will normally expand on and must always be consistent with first aid measures on the label.

Section 9

WHMIS legislation requires that material safety data sheets be kept current and that they be prepared no earlier than three years prior to receipt of the product in the workplace. Information in this section is designed to help ensure compliance with this requirement.

Content of a MSDS

Section 1

The intent of this section is to provide for product and manufacturer/supplier identification and a description of product use. It is of particular use in organizing data sheets for quick retrieval and in emergency circumstances for contact with the manufacturer and supplier.

Section 2

This section provides information on the identity, concentration and estimators of acute toxicity for ingredients in a controlled product.

Section 3

This section provides a physical description of the product which is useful for recognition of presence, an understanding of its response to change in the physical environment, and has specific application for ventilation system design and emergency procedures.

Section 4

The intent of Section 4 is to provide information to assist with fire and explosion prevention, and procedures in the event of emergency. This section is particularly important with flammables, solvents, organic peroxides, explosives, metal dusts and other unstable substances. If the product is not flammable or explosive, information in this section must reflect that fact.

Section 5

The intent of this section is to provide information on the stability of the product and its likelihood of dangerous reaction with other chemicals. Information here has implications for handling procedures, storage arrangements and may be useful along with Section 4 data for the prevention and control of fires or explosions.

Controlled Products

A controlled product is any product, material or substance which meets the criteria of being a workplace hazard as defined in the Controlled Products Regulation. There are six classes of hazards:

- A** A Compressed Gas
- B** Flammable and Combustible Material
- C** Oxidizing Material
- D** Poisonous and Infectious Material
- E** Corrosive Material
- F** Dangerously Reactive Material

Each class has a distinctive Hazard Symbol to alert workers to the hazards presented by the material.

What is a WHMIS Label?

A WHMIS label is a source of information on a controlled product designed to alert employers and workers, in an easily understood way, to the hazards of the product and the precautions to be taken with it.

A label may be a mark, sign, stamp, device, seal, sticker, ticket, tag or wrapper and must be attached to, or imprinted, stencilled or embossed on the controlled product or a container of the product.

Hazard Symbols

The Symbol Means

You Should



Class A-Compressed Gas

- It is a gas under pressure.
- Heat may cause it to explode.
- A drop or impact may cause it to explode.
- Handle with care.
- Store in a designated area.
- Keep away from heat.

Class B-Flammable and Combustible



- The material is a fire hazard.
- It may burn at low temperature.
- Sparks, flame or friction could ignite it.
- Keep away from heat sources.
- Never smoke near it.
- Store in a designated area.
- Keep away from oxidizers, Class C.

Class C-Oxidizing



- The material is a fire or explosion risk near flammable or combustible material.
- May burn skin or eyes on contact.
- Keep away from sources of ignition.
- Never smoke near it.
- Wear eye or face shields, gloves or other protective clothing as required.
- Keep away from combustible material, especially Class B.

Class D-Poisonous and Infectious



D1. Immediate and Serious

- The material is poisonous and may have immediate and serious effects.
- It can be fatal if inhaled, ingested or absorbed.
- It may affect the eyes.
- Handle with care.
- Avoid contact, use proper protective equipment.
- Use in a well ventilated area.
- Wash immediately on contact.
- Store in designated area.

PRODUCT IDENTIFIER			
SECTION 6 — TOXICOLOGICAL PROPERTIES			
ROUTE OF ENTRY			
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			
EFFECTS OF CHRONIC EXPOSURE TO PRODUCT			
EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS
SECTION 7 — PREVENTIVE MEASURES			
PERSONAL PROTECTIVE EQUIPMENT:			
GLOVES (SPECIFY)	RESPIRATOR (SPECIFY)	EYE (SPECIFY)	
FOOTWEAR (SPECIFY)	CLOTHING (SPECIFY)	OTHER (SPECIFY)	
ENGINEERING CONTROLS (SPECIFY, E.G. VENTILATION ENCLOSED PROCESS)			
LEAK AND SPILL PROCEDURE			
WASTE DISPOSAL			
HANDLING PROCEDURES AND EQUIPMENT			
STORAGE REQUIREMENTS			
SPECIAL SHIPPING INFORMATION			
SECTION 8 — FIRST AID MEASURES			
SPECIFIC MEASURES			
SECTION 9 — PREPARATION DATE OF MSDS			
PREPARED BY (GROUP, DEPARTMENT, ETC.)	PHONE NUMBER	DATE	

MATERIAL SAFETY DATA SHEET

SECTION 1 — PRODUCT IDENTIFICATION AND USE					
PRODUCT IDENTIFIER			PRODUCT IDENTIFICATION NUMBER (PIN)		
PRODUCT USE					
MANUFACTURER'S NAME			SUPPLIER'S NAME		
STREET ADDRESS			STREET ADDRESS		
CITY		PROVINCE	CITY		PROVINCE
POSTAL CODE	EMERGENCY TELEPHONE NO.		POSTAL CODE	EMERGENCY TELEPHONE NO.	
SECTION 2 — HAZARDOUS INGREDIENTS					
HAZARDOUS INGREDIENTS	%	CAS NUMBER	LD ₅₀ OF INGREDIENT (SPECIFY SPECIES AND ROUTE)	LC ₅₀ OF INGREDIENT (SPECIFY SPECIES)	
SECTION 3 — PHYSICAL DATA					
PHYSICAL STATE		ODOUR AND APPEARANCE		ODOUR THRESHOLD (ppm)	
VAPOUR PRESSURE (mm Hg)	VAPOUR DENSITY (AIR=1)	EVAPORATION RATE	BOILING POINT (°C)	FREEZING POINT (°C)	
pH	SPECIFIC GRAVITY	COEFF. WATER/OL. DIST.			
SECTION 4 — FIRE AND EXPLOSION DATA					
FLAMMABILITY YES <input type="checkbox"/> NO <input type="checkbox"/> IF YES, UNDER WHICH CONDITIONS?					
MEANS OF EXTINCTION					
FLASHPOINT (°C) AND METHOD		UPPER FLAMMABLE LIMIT (% BY VOLUME)	LOWER FLAMMABLE LIMIT (% BY VOLUME)		
AUTOIGNITION TEMPERATURE (°C)		HAZARDOUS COMBUSTION PRODUCTS			
EXPLOSION DATA	SENSITIVITY TO IMPACT		SENSITIVITY TO STATIC DISCHARGE		
SECTION 5 — REACTIVITY DATA					
CHEMICAL STABILITY YES <input type="checkbox"/> NO <input type="checkbox"/> IF NO, UNDER WHICH CONDITIONS?					
INCOMPATIBILITY WITH OTHER SUBSTANCES YES <input type="checkbox"/> NO <input type="checkbox"/> IF SO, WHICH ONE(S)?					
REACTIVITY, AND UNDER WHAT CONDITIONS					
HAZARDOUS DECOMPOSITION PRODUCTS					

The Symbol Means

You Should

D2. Other Toxic Effects



- The material is poisonous on repeated exposures.
- It may be an eye or skin irritant.
- It may be a sensitizer.
- It may cause cancer.
- It may cause birth defects.

- Handle with care
- Avoid contact, use proper protective clothing.
- Use in a well ventilated area.
- Wash immediately on contact.
- Store in designated areas.

D3. Biohazardous



- The material may cause disease
- The material may contain poisonous toxins.

- Handle with care - avoid contamination.
- Use in designated areas.
- Use protective equipment.

Class E-Corrosive



- The material causes severe eye and skin damage.

- Avoid skin or eye contact.
- Use proper protective equipment.
- Wash immediately on contact.
- Store in designated areas.

Class F-Dangerously Reactive



- The material is unstable.
- It undergoes vigorous chemical reactions.
- Shock, pressure or temperature changes may start chemical reactions.
- It may react with water.

- Keep away from heat.
- Do not shake or jar, open carefully.
- Keep away from water.
- Store in a designated area.

Safe Handling Symbols

The Symbol Means



- The material may harm eyes.
- Can be liquid or solid.



- The material may harm skin.
- The material may be absorbed through the skin.
- Usually in liquid form.



- The material may harm the digestive tract.
- Can be a risk in all forms.



- The material may be harmful if inhaled.
- Gasses, vapours or aerosols can be a hazard.

You Should

- Use proper work procedures.
- Avoid splashes.
- Use engineering controls.
- Use protective eye wear.

- Use proper work procedures.
- Use gloves, aprons, boots or other equipment as needed.
- Use barrier creams.
- Wash immediately.

- Do not smoke, eat or drink in area.
- Wash after use or if in contact.

- Use ventilation or other engineering controls.
- Use respirator.

The data sheet is not:

1. A document intended to represent all the information needed for the safe use of a product. Circumstances of product use and the potential for worker exposure vary from one work location to another. The variety of required protective measures cannot be anticipated through one sheet. Further, it is often necessary to develop jobsite instruction materials and written work procedures based on the data sheet which provide direction to workers in plain language.
2. A document only to be read and filed. It is essential that the data sheet be translated into an active program of worker protection.

Personal Protective Equipment Symbols



1. Chemical goggles



6. Supplied air respirator



2. Face shield



7. Hand protection



3. Protective apron



8. Foot protection



4. Disposable dust mask



9. Full body protective clothing



5. Cartridge respirator

What is a Material Safety Data Sheet?

A material safety data sheet is a technical document which provides detailed and comprehensive information on a controlled product related to:

- health effects of overexposure to the product;
- hazard evaluation related to the product's handling, storage or use;
- measure to protect workers at risk of overexposure; and
- emergency procedures.

The data sheet is:

An essential starting point in the development of a worksite program for the safe use of controlled products:

1. as a technical information reference;
2. as a document which can be distributed for the use of persons with responsibilities related to its content; for example, health and safety coordinators and committees, first aid personnel, fire response teams and in work areas where the product is used;
3. as a starting point for the implementation of control measures to protect workers;
4. as a key element of worker education; and
5. as a means of easily updating a program when revisions of data sheets become available.

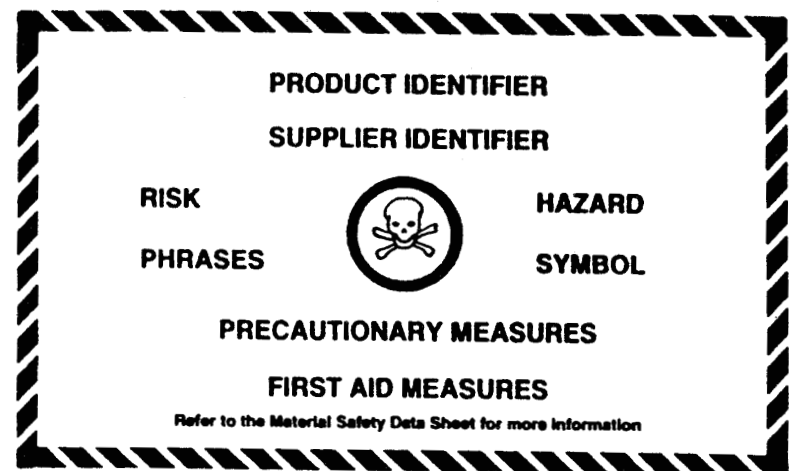
The Supplier label, the Workplace label and other means of identification

1. The Supplier Label

The label provided, as a condition of sale, by the supplier of a controlled product. A supplier is a person who is a manufacturer, processor or packager of a controlled product or a person who imports or sells such products.

The supplier label must meet requirements regarding hazard symbols, information categories and label design, format and language. Flexibility is provided in the choice of wording within categories and in label format.

The supplier is responsible for the application of the supplier label to the controlled product unless, under permitted circumstances, the purchaser assumes that responsibility.



SUPPLIER

2. The Workplace Label

An employer must provide a workplace label for controlled products or containers of controlled products in circumstances such as:

- the production and use of a controlled product in the workplace; or
- the transfer of a controlled product received from a supplier to another container in the workplace.

Workplace labels must include information on product identity and safe handling but considerable flexibility is permitted in label wording and format.

The information on the supplier label or MSDS is used to create the worksite label. The name of the product is written across the top of the label. The hazard ratings that apply are checked off. Special instructions or precautions can be written in the bottom section.

3. Other Means of Identification

Workplace labels are not required with some portable containers, with transfer or conveyance systems and process or reaction vessels. However, in such cases, other means of identification must be used (warning signs, number or colour codes, piping diagrams, etc.) in combination with worker education to ensure workers are informed of the contents.

Winnipeg School Division Workplace Labels

Winnipeg School Division
WORKPLACE LABEL
PRODUCT IDENTIFIER

RISK PHRASES

PRECAUTIONARY STATEMENTS

FIRST AID MEASURES

REFER TO MATERIAL SAFETY DATA SHEET

←
Comes in 2 sizes
(large and small)

Note: Only product identifier and precautionary statements **MUST** be completed according to WHMIS regulation.

Winnipeg School Division
WORKPLACE LABEL
PRODUCT IDENTIFIER

RISK PHRASES

PRECAUTIONARY STATEMENTS

FIRST AID MEASURES

REFER TO MATERIAL SAFETY DATA SHEET

WORKPLACE LABEL

PRODUCT IDENTIFIER

See MATERIAL SAFETY DATA SHEET

Mark correct boxes:	HAZARD RATING FOR UNDILUTED PRODUCT				
	0	1	2	3	4
HEALTH					
FLAMMABILITY					
REACTIVITY					

SAFE HANDLING / PERSONAL PROTECTION

GOGGLES	GLOVES	BOOTS	APRON
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OTHER:

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