



## WHMIS-WORKPLACE HAZARDOUS MATERIAL INFORMATION SYSTEM

### POINTS TO EMPHASIZE

- Label all controlled hazardous materials.
- Obtain MSDS for all controlled materials.
- Train employees.

WHMIS is a comprehensive plan for providing information on the use of controlled hazardous materials in the work place. There are six classifications of WHMIS, several of which have divisions or sub-divisions.

### WHMIS classifications



**Compressed Gases - Class A** - indicates a container with pressure inside. If the container is damaged or dropped so as to weaken it in any way, it may rupture or explode. Examples: propane, oxygen, and acetylene.



**Flammable & Combustible Material - Class B** - is a product, which may ignite, or burn or may be explosive in some situations. It may react with other materials to form a flammable gas. Examples are gasoline and paint thinners.



**Oxidizing Material - Class C** - This material can create a fire in the presence of flammable or combustible materials. It can also react violently or cause an explosion in contact with organic materials. May burn eyes and skin on contact.



**Poisonous - Class D 1 (A & B)** This material can act quickly to produce toxic effects or death if it enters the body. Example: pine oil, cyanide. Two subdivisions are provided:

- A – very toxic materials
- B – toxic materials



**Other Toxic Effects – Class D2 (A&B)**. This symbol covers a wide range of potential hazards, both acute and chronic. Acute (immediate) effects can include eye or skin irritations or respiratory inflammation. Chronic (long-term) effects can include lung problems, liver or kidney damage, eventual cancer, birth defects, etc. Two subdivisions are provided

- A – very toxic materials
- B – toxic materials



**Biohazardous Infectious Materials – Class D3**. These materials are likely to infect the body with diseases. Example: from used hypodermic needles.



**Corrosive Material – Class E** - these materials can cause severe tissue damage with prolonged contact. Can cause severe eye and skin irritation upon contact. Example: chromic acid.



**Dangerously Reactive Material – Class F** - this material can react with other materials or is unstable. Dangers may occur from jarring, heating or exposure to light. Example: Acetylene

### Labels:

All hazardous products in the workplace must be labeled. There are two types of labels: *supplier labels* and *workplace labels*.

A **supplier label** must appear on all products received at workplaces, and contain the following information: product identifier, information on safe handling, supplier identification, statement that an MSDS is available, hazard classification symbols, risk phrases, precautionary measures, and first aid measures, have text in English and French, and have the WHMIS hatched border.

A **workplace label** is used when some of the controlled product is put into another container for use, a controlled product arrives in bulk without a supplier label, where a product is produced in the workplace, and where a supplier label has become illegible or has been accidentally removed.

Workplace labels must contain the following:

Product identifier, information on safe handling of the product, a statement that the MSDS is available. There is no specific design for workplace labels other than the content requirement.

### Workplace Identifier

A workplace identifier is a substitute for the workplace label. It's use is permitted in circumstances where a workplace label might not be practical. Example: controlled substances in pipes.

A workplace identifier could be, any means of identification, such as a colour coding, warning signs and pictures that convey the message.

## Material Safety Data Sheets

The Material Safety Data Sheet is the second level of the WHMIS Information delivery system. MSDS is compiled by the supplier of the product and contains the following information:

- the potential adverse effects to health from exposure, how to work safely with that product, hazard evaluations on the use, storage and handling of the product, personal protective equipment needed, and emergency procedures related to the product.

Every MSDS must be current and updated every three years. The employer must obtain any new information added to the MSDS by the supplier.

## Training

The third level of the WHMIS information delivery system is an employee education program. Employee training should include:

Education in the content, purpose, and significance of information labels and MSDS.

The use and types of identification, procedures for the safe handling storage, use and disposal of controlled products.

Training in emergency procedures involving controlled products and procedures to follow when stray emissions are present.

### **Are there any questions?**

Finally, lets take a moment to review some of the “Do’s and Don’ts” of WHMIS.

#### **DO:**

- Identify and label all portable containers.
- Obtain MSDS for all chemicals in the workplace.
- An inventory of all controlled products used in the workplace.
- Replace labels as necessary.
- Know WHMIS classifications.
- Address leaking chemicals and spills immediately.
- Read the product label and MSDS before using any chemicals for the first time.
- Train employees.

#### **DON’T:**

- Remove labels
- Handle chemicals without appropriate
- Personal Protective Equipment
- Use a chemical if it has no label or MSDS
- Use old chemical unless approved by your supervisor
- Mix chemicals unless specifically directed by the chemical supplier
- Trust appearance as an indicator of safety

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