WHMIS (Workplace Hazardous Materials Information System) is a Canada-wide system designed to protect the health and safety of workers by providing information about the safe handling, use, storage, and disposal of hazardous products used at work.

Some hazardous products that are common in construction are

- Compressed gas (acetylene, oxygen)
- Flammable and combustible materials (solvents)
- Oxidizing materials (epoxy hardeners)
- Solvents, coatings, and sealers
- Silica
- Acids and alkalis.

**Transition to WHMIS 2015**

In February 2015, the Government of Canada made changes to the WHMIS 1988 system to make Canada’s chemical hazard communication system similar to other countries. This new system is called WHMIS 2015.

A transition period will give provinces and territories time to modify their regulations and give suppliers and employers time to change their systems and train their workers. This transition period will end in December 2018. The information in this chapter is based on the WHMIS requirements during the transition period.

The key changes for WHMIS 2015 are new hazard classes, new pictograms used to communicate the hazards, and new formats for supplier labels and material safety data sheets (now called safety data sheets).

For more information, visit the national website for WHMIS 2015: www.whmis.org

**Right to Know**

WHMIS gives every worker the right to know about hazardous products they work with and ensures workers have access to that information by using:

1. Supplier or workplace labels
2. (Material) safety data sheets ((M)SDSs)
3. Worker training and education.

**Worker Training and Education**

All employers are required by law to provide WHMIS training for specific hazardous products the worker will be working with or near. Updated training should be provided as new products are introduced.

The employer must review the WHMIS education program at least annually in consultation with the JHSC or Health & Safety Representative to determine if the program needs to be updated and workers need to be retrained.

Employers must complete the transition to WHMIS 2015 by December 2018. Until then, they must ensure that workers who may be exposed to hazardous products receive training on both WHMIS 1988 and WHMIS 2015.

**Hazard Classes**

WHMIS hazardous products fall into one or more hazard classes, each of which has a specific symbol or pictogram associated with it.

**WHMIS 1988** divides hazardous products into six classes (A to F). (See Figure 3-1.)

<table>
<thead>
<tr>
<th>Class A</th>
<th>Class B</th>
<th>Class C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressed Gas</td>
<td>Flammable and Combustible Material</td>
<td>Oxidizing Material</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class D</th>
<th>Class E</th>
<th>Class F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poisonous and Infectious material</td>
<td>Corrosive Material</td>
<td>Dangerously Reactive Material</td>
</tr>
</tbody>
</table>

Figure 3-1: Hazard Classes for WHMIS 1988
WHMIS 2015 uses pictograms to describe nine hazard classes (Figure 3-2). These pictograms must be printed in colour inside a red diamond-shaped border (shown as grey in the images below).

### Figure 3-2: Hazard Classes for WHMIS 2015

<table>
<thead>
<tr>
<th>Flame (fire hazards)</th>
<th>Exploding Bomb (explosion or reactivity hazards)</th>
<th>Flame Over Circle (oxidizing hazards)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Flame Pictogram" /></td>
<td><img src="image" alt="Exploding Bomb Pictogram" /></td>
<td><img src="image" alt="Flame Over Circle Pictogram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Hazard (serious health effects)</th>
<th>Exclamation Mark (less serious effects)</th>
<th>Corrosion (metals, skin, eyes)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Health Hazard Pictogram" /></td>
<td><img src="image" alt="Exclamation Mark Pictogram" /></td>
<td><img src="image" alt="Corrosion Pictogram" /></td>
</tr>
</tbody>
</table>

| Gas Cylinder (can explode if heated) | Skull & Crossbones (death or toxicity) | Biohazardous Infectious Materials |
|-------------------------------------|-------------------------------- ------|----------------------------------|
| ![Gas Cylinder Pictogram](image) | ![Skull & Crossbones Pictogram](image) | ![Biohazardous Infectious Materials Pictogram](image) |

IHSA has developed a new poster outlining the new pictograms and hazard classes for WHMIS 2015 (Figure 3-3). Order the WHMIS 2015 Poster (P003) to help reinforce the training workers have received on the new system.

### Figure 3-3: WHMIS 2015 Poster (P003)

**WHMIS Labels**

Labels are an important component of WHMIS. They provide a brief description of the hazards associated with the product and the precautions to take when using the product, as well as other information.

All hazardous products must have a label. There are two types of labels:

1. **Supplier labels**
2. **Workplace labels**

**Supplier labels** (Figure 3-4) are required for hazardous products used in the workplace that meet the WHMIS classification criteria. These labels must include the following elements:

- **Product identifier** – name of the product
- **Signal word** – used to alert the user and describe the severity of the hazard associated with product
- **Hazard statement** – a phrase assigned to a hazard class that describes the nature of the product’s hazards
- **Precautionary statements** – describes recommended measures to minimize adverse effects resulting from exposure
- **Supplier identification** – the name, address, and telephone number of the manufacturer or importer
- **Pictograms** – graphical symbols intended to convey specific hazard information visually.

![Product K1 / Produit K1](image)

**Workplace labels** (Figure 3-5) are required when hazardous products are produced onsite or have been transferred from a supplier-labelled container to a different container. A workplace label is also required when the supplier label has become illegible or has been removed.

Workplace labels must contain the following information:

- The identity of the product
- Information for safe handling of the product
- A statement that an (M)SDS is available.
(Material) Safety Data Sheet

An (M)SDS must be available for every hazardous product in your workplace. It provides more detailed information about the hazardous product.

Suppliers must provide a current (M)SDS with their product. Employers must update a supplier SDS as soon as practicable after significant new data about the product is provided by the supplier or otherwise becomes available to the employer.

Below are the sections required to be displayed on an SDS under WHMIS 2015.

1. Identification
2. Hazard Identification
3. Composition Information on Ingredients
4. First Aid Measures
5. Fire Fighting Measures
6. Accidental Release Measures
7. Handling and Storage
8. Exposure Controls/Personal Protection
9. Physical and Chemical Properties
10. Stability and Reactivity
11. Toxicological Information
12. Ecological Information
13. Disposal Considerations
14. Transport Information
15. Regulatory Information
16. Other Information

For more information on the health effects of hazardous products in the workplace, see Chapter 5: Occupational Health.