



FACT SHEET

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM) 2015 AND GHS (GLOBAL HARMONIZED SYSTEM) COMPLIANCE



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CANADIAN AGRICULTURAL SAFETY ASSOCIATION
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BACKGROUND:

The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) is an internationally consistent approach to classifying chemicals and communicating hazard information through labels and safety data sheets.¹

Incorporating GHS into WHMIS has led to some important changes in Canada, including:

- New pictograms that replace hazard symbols
- More hazard classes
- Material Safety Data Sheets (MSDS) are now called Safety Data Sheets (SDS)
- Changes to supplier labels

KEY POINTS:

Visit WHMIS.org or the federal, provincial or territorial occupation health and safety regulatory agency in your jurisdiction for information specific to your province or territory.

PICTOGRAMS:

The new WHMIS 2015 pictograms are similar to the WHMIS 1988 hazard symbols. However, there are four new pictograms and two symbols have been retired.

1. Government of Canada, 'Globally Harmonized System of Classification and Labelling of Chemicals for Workplace Chemicals', (2015), online: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/occupational-health-safety/workplace-hazardous-materials-information-system/whmis-2015/labelling-chemicals-workplace-chemicals.html>

WHMIS 2015 PICTOGRAMS:

	FLAME (for fire hazards)		FLAME OVER CIRCLE (for oxidizing hazards)		CORROSION (for corrosive damage to metals, as well as skin, eyes)
	SKULL AND CROSSBONES (can cause death or toxicity with short exposure to small amounts)		NEW EXPLODING BOMB (for explosion or reactivity hazards)		NEW EXCLAMATION MARK (may cause less serious health effects or damage the ozone layer*)
	NEW HEALTH HAZARD (may cause or suspected of causing serious health effects)		GAS CYLINDER (for gases under pressure)		NEW ENVIRONMENT* (may cause damage to the aquatic environment)
	BIOHAZARDOUS INFECTIONS MATERIALS (for organisms or toxins that can cause diseases in people or animals)				

*The GHS system also defines an Environmental hazards group. This group (and its classes) was not adopted in WHMIS 2015. However, you may see the environmental classes listed on labels and Safety Data Sheets (SDSs). Including information about environmental hazards is allowed by WHMIS 2015.

The two retired WHMIS hazard symbols are:

	DANGEROUSLY REACTIVE MATERIALS		MATERIALS CAUSING OTHER TOXIC EFFECTS
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HAZARD CLASSES:

In WHMIS 1988, there were six hazard classes. Under WHMIS 2015, there are now two major groups of hazards: physical and health. Each hazard group includes classes that have specific properties. Below, see the list of hazard classes under each grouping:

PHYSICAL HAZARDS (19 CLASSES)

Based on the physical or chemical properties of the product.

- Flammable gases
- Flammable aerosols
- Oxidizing gases
- Gases under pressure
- Flammable liquids
- Flammable solids
- Self-reactive substances and mixtures
- Pyrophoric liquids
- Pyrophoric solids
- Self-heating substances and mixtures
- Substances and mixtures which, in contact with water, emit flammable gases
- Oxidizing liquids
- Oxidizing solids
- Organic peroxides
- Corrosive to metals
- Combustible dusts
- Simple asphyxiants
- Pyrophoric gases
- Physical hazards not otherwise classified

HEALTH HAZARDS (12 CLASSES)

Based on the ability of the product to cause a health hazard or carcinogenicity.

- Acute toxicity
- Skin corrosion/irritation
- Serious eye damage/eye irritation
- Respiratory or skin sensitization
- Germ cell mutagenicity
- Carcinogenicity
- Reproductive toxicity
- Specific target organ toxicity – single exposure
- Specific target organ toxicity – repeated exposure
- Aspiration hazard
- Biohazardous infectious materials
- Health hazards not otherwise classified

Note: GHS also defines an Explosive class and the Environmental Hazards group (not mandatory). The WHMIS regulations do not currently include the Explosives hazard class. Explosives are covered by other legislation in Canada.



SAFETY DATA SHEETS (SDS):

The Safety Data Sheets have 16 categories, up from the nine categories found on the previous MSDS version.

The SDS formats are now standardized into the following sections:

- 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

NOTE: Sections 12 to 15 require the headings to be present, but under Canadian regulations, the supplier has the option to not provide information in these sections.

PRODUCT LABELS:

Labels must be in English and French. They may be bilingual or be presented as two labels. Labels must include the pictogram(s), signal word, and hazard statement grouped together on the label. Labels have to be clearly and prominently displayed on the container, easy to read and be in contrast with other information on the container. The hatched border previously used by WHMIS (1988) is no longer required.

GENERAL CHEMICAL PRODUCT LABELS (EXEMPTION PEST CONTROL PRODUCTS)

SIGNAL WORD – This is new. It will either say “Danger” or “Warning” to emphasize hazards and indicate their severity. In some cases, no signal word is required.

NOTE: “Danger” is used for high risk hazards, while “Warning” is used for less severe hazards. If a signal word is assigned to a hazard class and category, it must be shown on the label, and listed in section 2 (Hazards Identification) of the Safety Data Sheet (SDS).



PEST CONTROL PRODUCT LABELS:

It is important to note that some products, such as pesticides, are governed by other regulations in Canada (e.g. Pest Control Products Act). As a result, these labels may have different signal words, hazard symbols, etc. compared to the SDS. For some products, including pesticides, PPE requirements may vary depending on the job you're performing and the product you are using, so make sure you have the right PPE for the job by always reading and following the label.

WORK ACTIVITY:

NOTE: For information on employer or worker obligations under WHMIS visit WHMIS.org or the federal, provincial or territorial occupation health and safety regulatory agency in your jurisdiction.

If you are an employer, you must:

- Make sure all hazardous products are properly labelled
- Make up-to-date Safety Data Sheets readily available to workers
- Provide worker education and training
- Make sure appropriate control measures are in place to protect the health and safety of workers

Please note: Employers have a choice when deciding on a WHMIS education and training provider. The goal is to provide training that best suits your farm. Training should include general WHMIS education as well as specific training to your farm and the products you use.