

**The Globally Harmonized System for the Classification and Labelling of Chemicals
(The GHS)**

Implementation of the GHS in Canada

Workplace Hazardous Materials Information System (WHMIS)

TABLE 3 Label elements required by GHS compared to WHMIS

General Labelling Requirements

GHS	WHMIS
Product Identifier	Product Identifier
Supplier Identifier	Supplier Identifier
Hazardous Ingredients	
Hazard Pictogram - standardized	Hazard Symbol - standardized
Hazard Statement - standardized	Risk Phrases
Signal Word - standardized	
Precautionary Information	Precautionary Information First Aid Measures
	A statement that a material safety data sheet is available.

Analysis:

There are differences between the CPR and GHS with respect to labelling requirements.

Safety Data Sheets

GHS	WHMIS
Identification of the substance or mixture and of the supplier	Product Information
GHS product identifier	Product identifier
Other means of identification	
Recommended use of the chemical and restrictions on use.	Product Use
Supplier's details (including name, address, phone number, etc.)	Manufacturer's name,, street address, city, province, postal code and emergency telephone number Supplier identifier, the supplier's street address, city, province, postal code and emergency telephone number
Emergency phone number	Manufacturer's emergency telephone number Supplier identifier emergency telephone number
Hazards Identification	
GHS classification of the substance/mixture and any national or regional information	
GHS label elements, including precautionary statements (Hazard symbols may be provided as a graphical reproduction of the symbols in black and white or the name of the symbol e.g., flame, skull & crossbones.)	
Other hazards which do not result in classification (e.g., dust explosion hazard) or are not covered by the GHS	
Composition/information on ingredients	Hazardous Ingredients
Substance	
Chemical identity	Information required by subparagraphs 13(a)(I) to (iv) of the <i>Hazardous Products Act</i>
Common name, synonyms, etc.	
CAS number, EC number, etc.	CAS registry number and product identification number
Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance	

Mixture	
The chemical identity and concentration or concentration ranges of all ingredients which are hazardous within the meaning of the GHS and are present above their cut-off levels.	Information required by subparagraphs 13(a)(I) to (iv) of the <i>Hazardous Products Act</i>
First Aid Measures	First Aid Measures
Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact and ingestion.	Specific first aid measures
Most important symptoms/effects, acute and delayed.	
Indication of immediate medical attention and special treatment, if necessary.	
Fire-fighting measures	
Suitable (and unsuitable) extinguishing media.	Fire or Explosion Data - Means of extinction
Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products).	Fire or Explosion Data - Hazardous combustion products
Special protective equipment and precautions for fire-fighters.	
Accidental release measures	
Personal precautions, protective equipment and emergency procedures	Preventative measures - Personal protective equipment to be used
Environmental precautions	Preventative measures - Procedures to be followed in case of leak or spill
Methods and materials for containment and cleaning-up	Preventative measures - Procedures to be followed in case of leak or spill
Handling and storage	Preventative measures
Precautions for safe handling	Handling procedures and equipment
Conditions for safe storage, including any incompatibilities	Storage requirements
Exposure controls/personal protection	
Control parameters, e.g. occupational exposure limit values or biological limit values	Toxicological information - Exposure limits
Appropriate engineering controls	Preventative measures - Specific engineering controls to be used.

Individual protection measures, such as personal protective equipment	Preventative measures - Personal protective equipment to be used
Physical and chemical properties	Physical Data
Appearance (physical state, colour, etc.)	Physical state (i.e. gas, liquid or solid)
Odour	Odour and appearance
Odour threshold	Odour threshold
pH	pH
Melting point/freezing point	Freezing point
Initial boiling point and boiling range	Boiling point
Flashpoint	Fire or Explosion Data - Flashpoint and method of determination
Evaporation rate	Evaporation rate
Flammability	Fire or Explosion Data - Conditions of flammability hazard - Means of extinction
Upper/Lower flammability or explosive limits	Fire or Explosion Data - Upper flammable limit - Lower flammable limit
Vapour pressure	Vapour pressure
Vapour density	Vapour density
Relative density	
Solubility	
Partition Coefficient: n-octanol/water	Coefficient of water/oil distribution
Auto-ignition temperature	Fire or Explosion Data - Auto-ignition temperature
Decomposition temperature	
	Specific gravity
Stability and reactivity	Reactivity data
Chemical stability	
Possibility of hazardous reactions	Conditions of reactivity
Conditions to avoid (e.g. static discharge, shock or vibration).	Conditions under which the product is chemically unstable
Incompatible materials	Name of any substance or class of substance with which the product is incompatible
Hazardous decomposition products	Hazardous decomposition products
	Fire or Explosion - Conditions of explosion hazard
	Fire or Explosion - Explosion data - sensitivity to mechanical impact
	Fire or Explosion - Explosion data - sensitivity to static discharge

Toxicological information	
<p>Concise but complete and comprehensible description of the various toxicological effects and the available data used to identify those effects including:</p> <ul style="list-style-type: none"> - information on the likely routes of exposure (inhalation, ingestion, skin and eye contact); - symptoms related to the physical, chemical and toxicological characteristics; - delayed and immediate effects and also chronic effects from short-long-term exposure; - numerical measures of toxicity 	<ul style="list-style-type: none"> - Route of entry, including skin contact, skin absorption, eye contact, inhalation and ingestion - Effects of acute exposure to product - Effects of chronic exposure to product - Irritancy of product - Sensitization to product - Carcinogenicity - Reproductive toxicity - Teratogenicity - Mutagenicity - Name of toxicologically synergistic products <p>Hazardous Ingredients</p> <ul style="list-style-type: none"> - LD₅₀ (species and route) - LC₅₀ (species and route)
Ecological information	
Ecotoxicity (aquatic and terrestrial, where available)	
Persistence and degradability	
Bioaccumulative potential	
Mobility in soil	
Other adverse effects	
Disposal considerations	Preventative measures
Descriptions of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.	Waste disposal
Transport information	
UN number	
UN Proper shipping name	
Transport hazard class(es)	
Packing group, if applicable	
Marine pollutant (Yes/No)	
Special precautions which a user needs to be aware of or needs to comply with in connection with	Preventative measures - Special shipping information

transport or conveyance either within or outside their premises.	
Regulatory information	
Safety, health and environmental regulations specific for the product in question.	
Other information including information on preparation and revision of the SDS.	<p>Preparation Information</p> <p>(1) Name and phone number of the group, department or party responsible for the preparation of the material safety data sheet</p> <p>(2) Date of preparation of the material safety data sheet</p>