



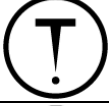





Controlled Product Classes	Division	Hazard Symbol	Examples	Danger
CLASS A Compressed Gas			oxygen, welding gas (argon), helium, propane, nitrogen	Always tries to expand.
CLASS B Flammable & Combustible Materials	B1 Flammable Gas B2 Flammable Liquids B3 Combustible Liquids B4 Flammable Solids B5 Flammable Aerosols B6 Reactive Flammable Materials		solvents, fuels	Fire (flammable materials are usually more dangerous than combustibles).
CLASS C Oxidizing Materials			oxygen, sodium hypochlorite (bleach)	Liberates oxygen and supports combustion.
CLASS D Poisonous & infectious Materials	D1A Materials Causing Immediate and Serious Toxic Effects – Very Toxic D1B Materials Causing Immediate and Serious Toxic Effects - Toxic		cleaning fluid, hydrogen sulphide	Death
	D2A Materials Causing Other Toxic Effects – Very Toxic Material D2B Materials Causing Other Toxic Effects – Toxic Material		asbestos, benzene	Long term health problems
	D3 Biohazardous Infectious Materials		viruses, bacteria	Diseases
CLASS E Corrosive Materials			caustics, acids	Damage to skin or metals
CLASS F Dangerously Reactive Materials			metal cyanides, acetylene, sulphuric acid (drain cleaner)	Injury or death






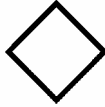

Consumer Products and Restricted Products						
						
Corrosive	Flammable	Poison	Explosive	Caution	Warning	Danger
<u>Provincial (British Columbia)</u>			<u>Federal (Canada)</u>			
<ul style="list-style-type: none"> a product, material or substance packaged as a consumer product & in quantities normally used by the consuming public is known as a consumer product. 			<ul style="list-style-type: none"> chemicals other than controlled products being stored, handled, used or disposed of in the work place shall be labelled in a manner that discloses clearly (a) the generic name of the substance and (b) the hazard information in respect of the substance other than controlled products, an MSDS must be obtained from the supplier & kept available to workers at the workplace. 			

Table 1: HMIS Labelling System

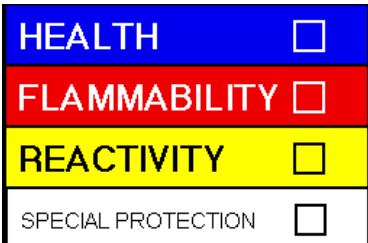
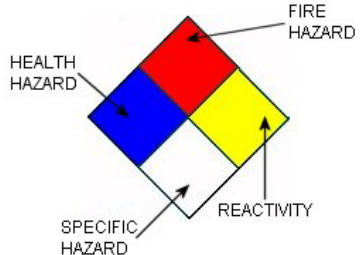
<p>“HMIS” stands for Hazardous Material Identification System. This labelling system is based on the American Society of Testing and Materials (ASTM) Designation: D4257. Hazards of chemicals are rated on a scale of 0 to 4 for each category – health, fire, reactivity. For example, a health hazard rating of 0 means that the chemical poses no significant hazard, even over a long period of time, whereas a hazard rating of 4 means that the chemical is life threatening in a short period of time. The specific definitions related to each number are provided below.</p>		
<div style="display: flex; align-items: center;"> <div style="flex: 1;">  </div> <div style="flex: 1;"> <p>4 – SEVERE HAZARD 3 – SERIOUS HAZARD 2 – MODERATE HAZARD 1 – SLIGHT HAZARD 0 – MINIMAL HAZARD</p> </div> </div>		
Flammability Hazard Rating	Health Hazard Rating	Reactivity Hazard Rating
4 – Very flammable gases or very volatile flammable liquids with flash points below 73°F and boiling points below 100°F.	Life threatening, major or permanent damage may result from single or repeated exposures.	Materials that are readily capable of detonation or explosive decomposition at normal temperatures and pressures.
3 – Materials capable of ignition under almost all normal temperature conditions, including flammable liquids with flash points below 73°F and boiling points above 100°F as well as liquids with flash points between 73°F and 100°F.	Major injury likely unless prompt action is taken and medical treatment is given.	Materials that are capable of detonation or explosive reaction but require a strong initiating source or must be heated under confinement before initiation; or materials that react explosively with water.
2 – Material that must be moderately heated before ignition will occur, including flammable liquids with flash points at or above 100°F and below 200°F.	Temporary or minor injury may occur.	Materials that, in themselves, are normally unstable and will readily undergo violent chemical change but will not detonate. These materials may also react violently with water.
1 – Materials that must be preheated before ignition will occur. Flammable liquids in this category will have flash points at or above 200°F.	Irritation or minor reversible injury possible.	Materials that are normally stable but can become unstable at high temperatures and pressures. These materials may react with water but they will not release energy violently.
0 – Materials that are normally stable and will not burn unless heated.	No significant risk to health.	Materials that are normally stable, even under fire conditions, and will not react with water.

Table 2: NFPA Labelling System

<p>The National Fire Protection Association (NFPA) labelling system is similar to HMIS. The NFPA labelling system was established to give emergency responders (firefighters, police and hazardous materials (HAZMAT) teams) quick information on conditions immediately dangerous to life and health before they enter an area containing health, reactive, fire or corrosive hazards. The colour of the diamonds correspond with the HMIS colours. This system also uses a 0 to 4 rating with definitions assigned to each hazard category.</p>		
<div style="display: flex; align-items: center;"> <div style="flex: 1;">  </div> <div style="flex: 1;"> <p>4 – SEVERE HAZARD 3 – SERIOUS HAZARD 2 – MODERATE HAZARD 1 – SLIGHT HAZARD 0 – MINIMAL HAZARD</p> </div> </div>		
Flammability Hazard Rating	Health Hazard Rating	Reactivity Hazard Rating
4 – Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air, and which will burn readily. Flash point below 73°F and boiling point below 100°F.	Materials that, on very short exposure could cause death or major residual injury, including those that are too dangerous to be approached without specialized protective equipment.	Materials that in themselves are readily capable of detonation or explosive reaction at normal temperatures.
3 – Liquids and solids that can be ignited under almost all ambient temperature conditions. Flash point 73°F - 100°F and boiling point above 100°F.	Materials that on short exposure could cause serious temporary or residual injury.	Materials that in themselves are capable of detonation or explosive decomposition or reaction but require a strong initiating source or which must be heated under confinement before initiation or which may react violently with water.
2 – Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Flashpoint above 100°F and below 200°F.	Materials that, on intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury.	Materials that readily undergo violent chemical change at elevated temperatures and pressure or which may react violently with water or which may form explosive mixtures with water.
1 – Materials that must be pre-heated before ignition can occur. Flashpoint above 200°F.	Materials that, on exposure would cause irritation but only minor residual injury.	Materials that in themselves are normally stable but which can become unstable at elevated temperatures and pressures.
0 – Materials that will not burn.	Materials that, on exposure under fire conditions would offer, no hazard beyond that of ordinary combustible materials.	Materials that in themselves are normally stable, even under fire exposure conditions, and which are not reactive with water.