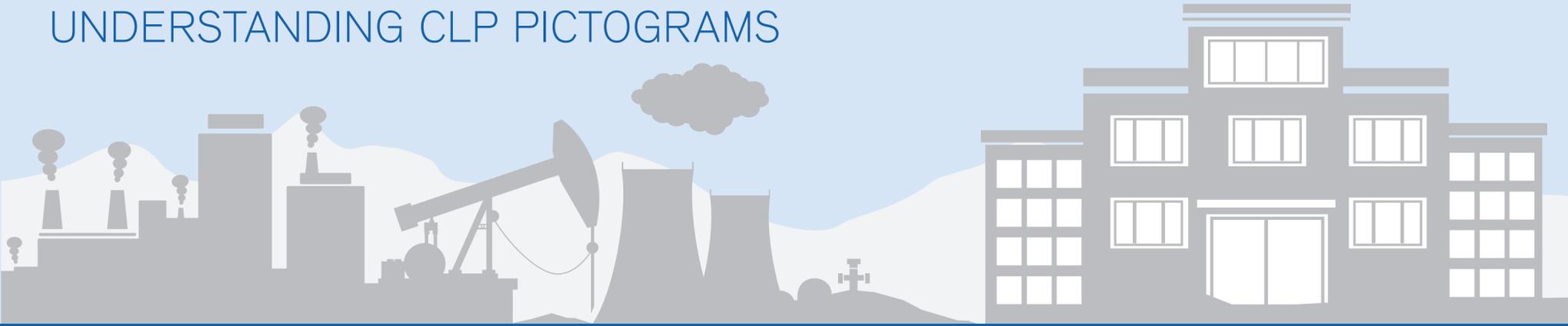


BREAKING DOWN THE IMAGE: UNDERSTANDING CLP PICTOGRAMS



When working with hazardous chemicals, you'll see helpful icons located on the labels. These visual reminders denote the nature and degree of hazard associated with the chemicals and, more importantly, they identify precautionary behaviors to help protect your health and the environment.

ICONS	HAZARD PICTOGRAM	WHAT IT REPRESENTS	KEY CHARACTERISTICS	TYPES OF SUBSTANCES	EXAMPLES OF WHERE IT CAN BE FOUND	PRECAUTIONARY STATEMENTS
	1. Flammable Substances	Extremely flammable gases, aerosols, liquids or vapors	Liable to self-ignite when exposed to water or pyrophoric substances	<ul style="list-style-type: none"> Flammables Pyrophoric substances Self-heating substances Self-reactives Organic peroxides 	<ul style="list-style-type: none"> Paint Hydrogen sulfide 	<ul style="list-style-type: none"> Keep away from heat/sparks/open flames/hot surfaces Keep cool
	2. Oxidizing Substances	Can react chemically to oxidize combustible materials, increasing chances of fire or explosion	Liquids, gases or solids that give off oxygen or other oxidizing substances	<ul style="list-style-type: none"> Oxidizing gases Oxidizing liquids Oxidizing solids 	<ul style="list-style-type: none"> Bromine Chlorine Fluorine Oxygen (for medical purposes) 	<ul style="list-style-type: none"> Keep away from heat/sparks/open flames/hot surfaces Immediately rinse contaminated clothing and skin with plenty of water before removing clothes
	3. Corrosive Substances	Attacks and chemically destroys exposed body tissues or metals on contact	Can affect skin and eyes or become corrosive toward metals	<ul style="list-style-type: none"> Strong acids or concentrated weak acids 	<ul style="list-style-type: none"> Hydrochloric Acid Ammonia Sulfuric acid Hydrogen peroxide 	<ul style="list-style-type: none"> Do not breathe in dust/fume/gas/mist/vapours/spray Keep only in original container
	4. Acute Toxic Substances	Fatal if inhaled, swallowed or comes in contact with skin	Effects following skin contact/ingestion within 24 hours or an inhalation exposure of 4 hours may lead to serious long-term health issues	<ul style="list-style-type: none"> Highly-concentrated acids Poisons 	<ul style="list-style-type: none"> Methanol Pesticides Hydrogen cyanide Nitrogen dioxide 	<ul style="list-style-type: none"> Do not eat, drink or smoke when using this product If swallowed, immediately call a poison control center or a physician
	5. Hazardous to the Environment	Toxic to aquatic life with long-lasting effects & should be disposed of responsibly	Causes long-lasting effects to the environment	<ul style="list-style-type: none"> Acute aquatic toxicity 	<ul style="list-style-type: none"> Pesticides Biocides 	<ul style="list-style-type: none"> Avoid exposure to environment Collect spillage
	6. Serious Health Hazardous Substances	Fatal if swallowed or enters airways	Reflects serious long-term health hazards, such as carcinogenicity and respiratory sensitization	<ul style="list-style-type: none"> Carcinogen Mutagenicity Reproductive toxicity Respiratory sensitizer Target organ toxicity Aspiration toxicity 	<ul style="list-style-type: none"> Petrol Carbon monoxide 	<ul style="list-style-type: none"> Wash thoroughly after handling Do not handle before all safety precautions have been read and understood
	7. Harmful Toxic or Irritating Substances	Immediately irritates skin, eye or respiratory tract	Most commonly enters the body through inhalation	<ul style="list-style-type: none"> Irritant (skin and eye) Skin sensitizer Hazardous to ozone layer (non-mandatory) Respiratory tract irritant 	<ul style="list-style-type: none"> Calcium chloride Acetone 	<ul style="list-style-type: none"> If in eyes, rinse cautiously with water for several minutes Wear protective gloves/clothing/eye protection/face protection
	8. Gas Under Pressure	Can refer to gases stored, compressed, liquefied or dissolved under pressure, like refrigerated gases, that can cause cryogenic burns or injuries	Can leak, causing a flammable, asphyxiating, toxic or oxidizing effect. Containers may burst	<ul style="list-style-type: none"> Refrigerated gas Dissolved gas Compressed gas Liquefied gas 	<ul style="list-style-type: none"> Gas containers 	<ul style="list-style-type: none"> Protect from sunlight Wear cold insulating gloves/face shield/eye protection
	9. Explosive	Explosive substance that's a fire, blast or projection hazard	Includes self-reactive substances and mixtures and organic peroxides. Explosives are sensitive to temperature and can be highly reactive, easily ignitable and burn rapidly	<ul style="list-style-type: none"> Explosives Self-reactives Organic peroxides 	<ul style="list-style-type: none"> Ammunition Ammonium perchlorate Acetylides 	<ul style="list-style-type: none"> Keep away from heat/sparks/open flames/hot surfaces Obtain special instructions before use

SOURCES: [1] <https://ehs.utoronto.ca/resources/whmis-what-you-need-to-know/flammable-substances/> [2] https://www.ccohs.ca/oshanswers/chemicals/oxidizing/oxidizing_hazards.html [3] <https://www.ccohs.ca/oshanswers/chemicals/corrosive/corrosiv.html> [4] http://www.ccohs.ca/teach_tools/chem_hazards/symbols.html [4B] <https://ehs.princeton.edu/news/know-your-hazard-symbols-pictograms> [5] http://www.ccohs.ca/teach_tools/chem_hazards/symbols.html [6] https://newsletter.echa.europa.eu/home/-/newsletter/entry/6_14_introducing-one-of-the-new-clp-pictograms-serious-health-hazard [7] https://www.ccohs.ca/oshanswers/chemicals/toxic/toxic_hazards.html [8] http://www.ccohs.ca/teach_tools/chem_hazards/symbols.html [9] http://www.ccohs.ca/teach_tools/chem_hazards/symbols.html