## **WHMIS Classification Symbols**

Controlled products are divided into six classes; all have a distinctive hazard symbol assigned to assist in identifying the associated risks.

	Symbol	Hazards	Safe Handling Measures
Class A Compressed Gas Examples: fire extinguishers, propane, chlorine, welding gases.		<ul> <li>Any product that is normally a gas at room temperature and kept in a container under pressure.</li> <li>If ruptured or broken may rocket or torpedo</li> <li>If heated, exposed to variations in temperature, dropped or abused, it may explode</li> <li>Liquefied compressed gas can cause severe burns from frostbite.</li> </ul>	<ul> <li>Keep container closed tightly and ensure valves are effective.</li> <li>Do not drop or handle roughly</li> <li>Keep from heat or changes in temperature.</li> <li>Must be secured and may require flashback arrester</li> </ul>
Class B Flammable & Combustible Material Examples: propane, gasoline		<ul> <li>Includes any solid, liquid or gas that will burn.</li> <li>May burn at relatively low temperatures</li> <li>May burst into flame spontaneously when in contact with air</li> <li>May release flammable gas when in contact with water</li> <li>May cause a fire if exposed to heat, sparks, flames or friction.</li> </ul>	<ul> <li>Keep away from heat or sources of ignition</li> <li>Do not smoke around these materials</li> <li>Avoid static discharges or impacts that could cause sparks</li> <li>Keep container tightly closed</li> </ul>
Class C Oxidizing Material Examples: Oxygen gas, hydrogen peroxide, bleach		Oxidizers cause other substances to burn or continue to burn because they release oxygen. Oxidizers will not usually catch fire by themselves.  • May cause a fire if it contacts combustibles such as wood.  • May react violently or cause an explosion if it contacts flammable substances, such as fuels.	<ul> <li>Keep away from heat</li> <li>Store in a cool place</li> <li>Keep away from flammable and combustible materials</li> <li>Avoid shock and friction</li> </ul>

Class D1 Material Causing Immediate & Serious Toxic Effects Examples: hydrogen sulphide, strychnine,	These materials are highly poisonous and immediately dangerous to life. The effects are acute.  • May be fatal or cause permanent damage if it enters the body through the skin, is inhaled or ingested.	<ul> <li>Do not breath gas or vapours</li> <li>Avoid skin contact</li> <li>Wear suitable personal protective equipment</li> </ul>
cyanide Class D2 Material Causing Other Toxic Effects Examples: asbestos, saccharin, mercury Class D3 Biohazardous Infectious Materials Examples: HIV, Hepatitis B, salmonella	Materials in this class are toxic, but their effects are not immediate but likely to harm you in some way.  • May cause death if repeatedly exposed  • May irritate eyes and skin  • May sensitize certain people and cause chemical allergies  • May cause cancer, birth defects and sterility These materials are organisms (and the toxins of organisms) that cause disease in persons and animals. They are germs – bacteria, viruses, fungi, etc. They also include cultures, concentrates and diagnostic specimens containing or suspected of containing such organisms.	<ul> <li>Do not breath gas or vapours</li> <li>Avoid skin contact</li> <li>Wear suitable personal protective equipment</li> <li>Wash hands thoroughly after using these materials</li> <li>Keep containers tightly closed</li> <li>Wear suitable protective equipment and clothing</li> <li>Seek medical attention if you feel ill</li> </ul>
Class E Corrosive Examples: sulphuric acid, caustic soda, many cleaners and disinfectants	<ul> <li>May cause serious illness and death</li> <li>These materials effects are permanent. Acids and bases are corrosive. Most corrosives are liquids but can be gases such as chlorine.</li> <li>Causes sever eye and skin irritation upon contact</li> <li>Causes severe tissue damage with long term exposure</li> <li>May be harmful if inhaled</li> </ul>	Avoid skin contact     Use recommended respiratory protective equipment and other personal protective equipment

Class F
Dangerously
Reactive
Material
Examples:
benzoyl peroxide,
epoxy resins.



This includes a wide variety of chemicals that are potentially self-reactive.

- It is very unstable
- May react with water to release toxic or flammable gas
- May explode if subjected to shock, friction or heat
- Undergoes vigorous polymerization
- Extremely reactive if it is stored for a long period of time.

- Keep away from heat
- Avoid contact with water
- Avoid shock and friction
- Wear suitable protective clothing