CHEMICAL HAZARD SYMBOL

Acute Toxic

Health Hazard

Flammable

Exclamation Mark

Flame over circle

Gas Cylinder

Exploding Bomb

Environmental Hazard

Radioactive

Corrosion

IF YOU DISCOVER A FIRE THINGS YOU MUST TO DO:

1. Know where to find the nearest exit in case of fire or other emergency.
2. Know the whereabouts of the nearest fire extinguisher, fire sand bucket, first aid kit.

- If an emergency situation arises while you are in the laboratory the first person you should inform is your lab demonstrator. Examples include a dangerous chemical spill, skin or eyes coming into contact with a hazardous substance, an injury from broken glass or fire. The lab staff will coordinate all emergency procedures & inform other staff as well as call for first aid assistance if it is required.

POTENTIALLY TOXIC AND CORROSIVE CHEMICALS

Chemicals	Nature of toxicity	Preventive action
Cadmium and its compounds	Cadmium (Cd) is an extremely toxic industrial and environmental pollutant classified as a human carcinogen. Acute exposure to cadmium fumes may cause flu-like symptoms including chills, fever, and muscle ache sometimes referred to as "the cadmium blues." More severe exposures can cause tracheo-bronchitis, pneumonitis, and pulmonary edema.	Must be extremely careful for handling and working with those acute toxins.
Hydrogen sulfide, Nitrogen dioxide, Arsenic and its compounds, Antimony and its compounds	Acute toxins can cause severe injury as a result of short-term, high-level exposure. In addition antimony trioxide is possibly carcinogenic to humans.	Zero exposure should be the goal when working with acute toxins. Use a fume hood to ensure proper ventilation.
Formaldehyde, Lead and its compounds, Mercury and its compounds, Tin and its compounds	Chronic toxins that cause severe injury after repeated exposure. Mercury in any form is poisonous, with mercury toxicity most commonly affecting the neurologic, gastrointestinal (GI) and renal organ systems	Zero exposure should be the goal when working with chronic toxins.
Asbestos, Benzene, Chromium (hexavalent),	Carcinogenic that can cause cancer in humans or animals.	Zero exposure should be the goal when working with known or suspected carcinogens.
Chloroform, Carbon disulfide, Cadmium nitrate, Sodium azide	Reproductive toxins that can produce adverse effects in parents and developing embryos.	Use a fume hood to ensure proper ventilation.
Ammonia, Sulfur dioxide, Phosgene, chlorine gas	Irritants that can cause reversible inflammation or irritation to the eyes, respiratory tract, skin, and mucous membranes.	Use a fume hood to ensure proper ventilation.
Isocyanates, Nickel salts, Beryllium compounds, Diazomethane	Sensitizers may cause little or no reaction upon first exposure. Repeated exposures may result in severe allergic reactions	Protect all exposed skin surfaces from contact with corrosive or irritating gases and vapors.
n-hexane, tetrachloroethylene, and toluene	neurotoxins that are destructive to nerve tissue	Use a fume hood to ensure proper ventilation.
Pyridine	Chronic exposure to pyridine causes hepatotoxicity and nephrotoxicity.	Use a fume hood to ensure proper ventilation.
Acids include hydrochloric acid, sulfuric acid, nitric acid, chromic acid, acetic acid and hydrofluoric acid, bases are ammonium hydroxide, potassium hydroxide and sodium hydroxide, Bromine, sodium hydroxide, sulfuric acid and hydrogen peroxide are examples of highly corrosive substances.	Corrosive substance causes very significant hazard because skin or eye contact can readily occur from splashes and their effect on human tissue.	The eyes are particularly vulnerable. It is therefore essential that approved eye and face protection be worn. Gloves and other chemically resistant protective clothing should be worn to protect against skin contact.