



Safety in chemical laboratories



PanReac
AppliChem
 ITW Reagents

IN CASE OF EMERGENCY

- **Keep yourself safe first and remain calm.**
- **Follow your company's emergency plan.** When calling the emergency number you must say who is calling, what has happened and where it has happened.
- **Ensure your own safety** before helping others.
- **Notify everyone around you** to stay away from the area.
- **In case of fire**, doors and windows must be closed. No one must ever tackle a fire alone.

THINK GREEN

In the laboratory, the consumption of solvents in stainless steel returnable containers provides an unbeatable option to contribute to environmental sustainability.

Get more information here



FIRST AID

GENERAL INDICATIONS: Seek medical assistance immediately and show the label and/or the Safety Data Sheet (SDS) in case of accidents with chemicals.



Chemical inhalation: Move to fresh air. If necessary, apply artificial respiration (for certain products such as cyanides, do not use mouth to mouth respiration).



Ingestion of chemicals: Do not induce vomiting or give anything to drink if the victim is convulsive or unconscious. Do not induce vomiting unless the SDS recommends vomiting.

Wash out the mouth with water and drink copious amounts of water. For corrosives and/or flammables substances, avoid vomiting (risk of aspiration/perforation).



Thermal burns: Immediately wash with water to cool down the burnt area. Do not remove clothing adhered to the skin. Cover the burned part aseptically. Do not apply ointments, grease or disinfectants. Do not use ice.



After eye/skin contact: Wash with plenty of water for at least 15 minutes. Use emergency safety shower/eye bath. Remove contaminated clothing.

COMMON PERSONAL PROTECTIVE EQUIPMENT



Wear **protective suit**



Wear **eye protection**



Wear **hand protection**



Wear **foot protection**



Wear **respirator** in the presence of **corrosive, toxic and/or asphyxiating vapours.**



Wear **face shield and eye protection** when working with **acids** or large amount of **hazardous chemicals.**

GENERAL LABORATORY SAFETY RULES

- **Laboratories** must always be **kept clean and tidy.**
- **Wear labcoat, gloves and safety glasses.** Protective clothing must be fastened or buttoned, with sleeves down.
- **Wear covered shoes** (not sandals), **long pants**, and tie long hair back while working. The use of contact lenses is not recommended even when wearing safety glasses.
- **Be informed about the emergency plan** and the location of emergency equipment in the laboratory (fire extinguishers, emergency shower, eyewash, etc.).
- **Read the label and check the Safety Data Sheet (SDS)** before using the chemical.
- **Label all containers with chemicals** (substances and preparations) appropriately.
- **Do not store or consume food and drinks in the laboratory.**
- **Never taste, sniff or touch chemicals.**
- **Never pipette by mouth.**
- **Dispose of all chemical/biological waste properly. Do not pour chemicals down the drain.**
- **Handle glassware carefully** (dispose of any damaged glassware, do not heat glassware with a direct flame, use silicone grease to prevent parts from sticking, use protection to separate stuck joints, etc.).
- **Do not keep large quantities of chemicals in the laboratory.**
- **Never work alone in the laboratory**, particularly in operations with risk.

GHS GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELING OF CHEMICALS



- Carcinogenicity
- Mutagenicity
- Reproductive toxicity
- Respiratory sensitizer
- Target organ toxicity
- Aspiration hazard



- Irritant effect (skin and eye)
- Sensitization of the skin
- Acute toxicity
- Specific target organ toxicity (respiratory irritation, narcotic effect)
- Harmful to the ozone layer



- Flammable substances
- Pyrophoric substances
- Self-heating substances
- Develops flammable gas in contact with water
- Self-reactive substances
- Organic peroxides
- Aerosols
- Desensitized explosive substances



- Skin corrosion/burns
- Eye damage
- Corrosive to metals



- Explosives
- Self-reactives
- Organic peroxides
- Unstable explosives



- Acute toxicity



- Gases under pressure



- Aquatic toxicity



- Oxidizers