

Guide to Basic Laboratory Safety

Chemistry Department

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This guide has been prepared by the Department of Chemistry for the use of all students and faculty. It is intended to provide a general overview of the safety procedures and to help you understand the responsibilities of each person in the laboratory. It is not intended to be a substitute for the specific safety instructions given by your instructor. It is your responsibility to read and understand the safety instructions given by your instructor and to follow them carefully. It is also your responsibility to report any safety incidents to your instructor immediately.

Rules to be followed without exception:

Eye protection is required in all laboratories. Safety glasses or goggles must be worn at all times. Contact lenses should not be worn in the laboratory. If you wear contact lenses, you must wear eye protection at all times.

Chemical spills should be reported immediately to your instructor. Do not attempt to clean up a spill unless you have been specifically trained to do so.

Unauthorized persons are not allowed in the laboratory. Only authorized personnel should be in the laboratory at all times. No food or drink is allowed in the laboratory.

CHEMICAL HAZARD INFORMATION

Before performing any experiments you should be aware of the hazards involved. Answers to the questions on the requirements of the hazard labels associated with the chemicals are provided in the notes on the edge of the safety file. The safety data sheet is a concise summary of the chemical's properties and information concerning the proper use of the chemical. It is found in the folder of resources, so see the folder of resources for more information.

The Merck index and the Condensed Chemical Dictionary

provide information on the physical and chemical properties, toxicity and uses of the chemical. See the Periodic Table and the Department of Chemistry Resource Manual.

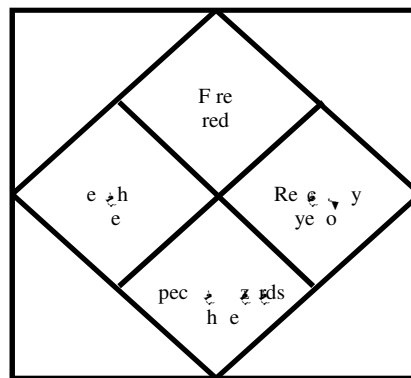
Material Safety Data Sheets

provide information on physical properties, toxicity, health effects, first aid, fire and explosion, reactivity, special procedures, precautions, environmental hazards and disposal conditions. See the MSDS section of the Resource Manual. A directory of safety data sheets is available in the Resource Manual.

NFPA National Fire Protection Association symbols

The NFPA system defines the hazards of chemicals in terms of four categories: health, fire, reactivity and special hazards. The order of severity is indicated by the number of hazard diamonds. The order of severity is indicated by the number of hazard diamonds. The order of severity is indicated by the number of hazard diamonds. The order of severity is indicated by the number of hazard diamonds.

Health
Severity
Order
Special
Hazard



A more detailed description of each hazard category is provided in the Resource Manual.

Health

Material Safety Data Sheet on very short exposure to dust or fumes or residues in the environment.

Material Safety Data Sheet on short exposure to dust or fumes or residues in the environment.

Material Safety Data Sheet on moderate exposure to dust or fumes or residues in the environment.

Material Safety Data Sheet on exposure to dust or fumes or residues in the environment.

Material Safety Data Sheet on exposure to dust or fumes or residues in the environment.

Fire (flammability)

Material Safety Data Sheet on ready or easily vaporized or dispersed in the atmosphere.

- 3 L q ds nd so ds h c n e gn ed nder os e en e per e re cond ons
- M er s h s e oder e y he ed ore posed ore e y h gh e en e per e res efore gn on c r
- M er s h s e prehe ed efore gn on c r
- M er s h no rn

Reactivity (instability)

- M er s h ch n he se es e re d y c e of de on on ore e pos e deco pos on ore re on e nor e per res nd press res
- M er s h ch n he se es e c e of de on on ore e pos e re on req re s rong n ng so rce ore h ch s e he ed nder conf ne en efore n or h ch re e pos e y h er
- M er s h ch n he se es e nor y ns e ad re d y ndergo on che c ch nge do no de on e A so er s h y re e on y h er ore h ch y for po en e y e pos e res h er
- M er s h ch n he se es e nor y s e h ch c eco e ns e e e ed e per e res nd press res ore h ch y re e h er h so e re e se of energy no on y
- M er s h ch n he se es e nor y s e e en nder fre pos re cond ons nd h ch e no re e h er

Special hazards

- OX M er s h e s rong o d zers
- M er s h h e n s e re e y h er
- P M er s h e s ec o po y er z on nder so e e ergency cond ons
- M er s h e r d on h z eds

EMERGENCY RESPONSE INFORMATION

In case of an emergency being calm is of the utmost importance. c y n P

Earthquake

- Move against the direction of the shaking and cover the head with the arms. If possible, get under a sturdy desk or table. If no desk or table is available, crouch against an interior wall. Do not use elevators.

Other emergencies

- For other emergencies, when the danger has passed, follow the instructions of the person in charge. Do not re-enter the building until the person in charge says it is safe to do so.

As a direct result of the sequence of decomposition, which you observe
in the video, the persons are not only dropped but also
Do not remain in the
Be aware of the requirements of the design Do not hesitate to
confront the process of the structure

