

Environmental Health & Safety Policy Manual

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Policy # EHS-200.06

Chemical Signage and Labeling Policy

1.0 PURPOSE:

Proper door signs and accurate labeling of hazardous material containers enhance safety by providing at-a-glance information on chemical hazards and appropriate personal protective equipment (PPE).

2.0 SCOPE:

Signs and label information procedures are intended to provide warnings and information about hazardous materials to all LSUHSC faculty, staff, and students.

3.0 RESPONSIBILITIES:

3.1 Environmental Health and Safety (EH&S) shall:

- Assess compliance with this policy through routine building and laboratory inspections.

3.2 Principal Investigators shall:

- Determine the hazards associated with the laboratory and ensure that proper warning signs are posted on the laboratory doors.
- Ensure that all original and secondary chemical containers are labeled properly.
- Provide training to all laboratory personnel on the specific hazards of the chemicals used and ensure that the correct hazard designations on labels for secondary containers are used.

3.3 Employees shall:

- Understand the safe handling and proper labeling of hazardous chemicals.
- Ensure that all original containers and secondary containers of hazardous chemicals are labeled properly.

4.0 IMPLEMENTATION:

4.1 Door Signs:

Signs on laboratory doors are used to communicate the hazards associated with a laboratory to workers or visitors before they enter the laboratory. Door signs also communicate who to contact in the event of an emergency. All laboratories shall have a standard door sign as shown in figure 1. If PPE is required, the items required should be posted. The following information should be included on all laboratory door signs:

- Laboratory personnel responsible for the laboratory.
- Contact numbers for responsible laboratory personnel.
- Icons showing the hazards associated with a laboratory (Figure 2).
- Words or icons showing any necessary PPE that is to be worn in the laboratory (Figure 3).

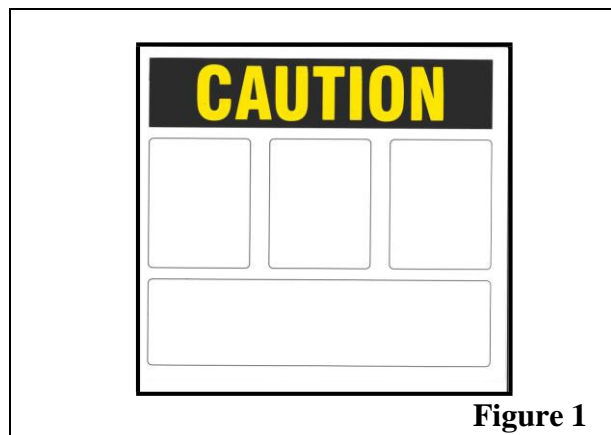


Figure 1

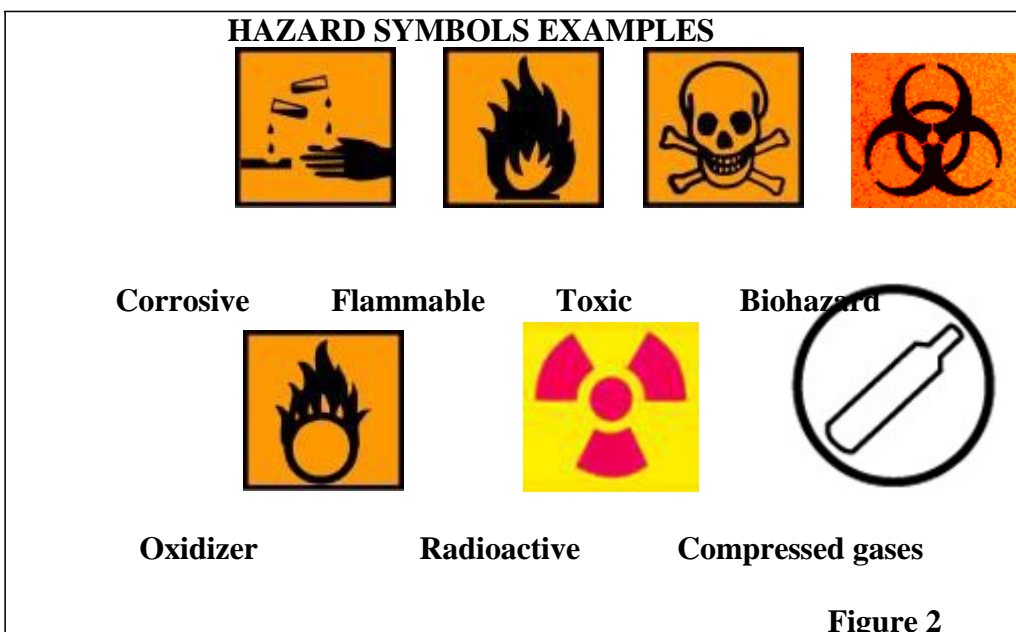


Figure 2



4.2 Labels

4.2.1 Manufacturer's Label:

- In addition to a Material Safety Data Sheet (MSDS), the manufacturer's label is a primary source of information concerning identification, hazards, and storage requirements of a hazardous material.
- If the hazardous material is received without a manufacturer's label or if the label is unreadable, the chemical should not be accepted and it should be returned to the manufacturer.
- All manufacturer labels should include the following information:
 - Name of chemical or material.
 - Manufacturer's name and address.
 - Primary hazard(s) of the material.

4.2.2 Secondary Container Labels:

- When hazardous materials are transferred from original containers to other containers or if solutions of hazardous chemicals are prepared in the laboratory, proper labeling of the secondary containers are required if:
 - The chemical or chemical solution is for other than immediate use.
 - The chemical that is transferred or the prepared chemical solution is intended for use by someone other than the person doing the transfer or making up the chemical solution.
- Information that is required on secondary container labels:
 - Name of chemical or compound.
 - Primary hazard information.
 - Date.
- To label secondary containers, information may be hand printed on the containers or preprinted commercial labels may be used. Two examples of preprinted commercial labels that are acceptable are the National Fire Protection Association (NFPA) 704 diamond and the National Paint and

Coatings Association, inc. Hazardous Materials Identification System (HMIS).

- National Fire Protection Association (NFPA) 704 Diamond (Appendix A).
The NFPA 704 diamond is a fire protection system designed to provide rapid, clear information to emergency responders on materials under conditions of fire, chemical spills, and other emergencies.
- Hazardous Materials Information System Label (HMIS) (Appendix B).
The HMIS label provides workers with at-a-glance information to identify the hazards of a chemical and the appropriate PPE if necessary.

5.0 EMPLOYEE TRAINING:

5.1 Initial Training

The Principal Investigator/Laboratory Supervisor will provide laboratory-specific training to all laboratory workers on the use of proper signs and hazard warning labels.

5.2 Training elements

- Location of MSDSs and how to understand the hazard information presented on the MSDS.
- Proper selection of the pictograms and icons to represent different hazards of the chemicals used in the laboratory and the required PPE if needed.

6.0 RECORDKEEPING:

Principal Investigators/Laboratory Supervisors shall maintain employee training records for the current fiscal year and the previous three fiscal years.

7.0 REFERENCES:

- OSHA Regulation 29 CFR 1910.1200; Hazard Communication
- OSHA Regulation 29 CFR 1910.1450; Occupational Exposure to Hazardous Chemicals in Laboratories
- Prudent Practices in the Laboratory Handling and Disposal of Chemicals; National Research Council

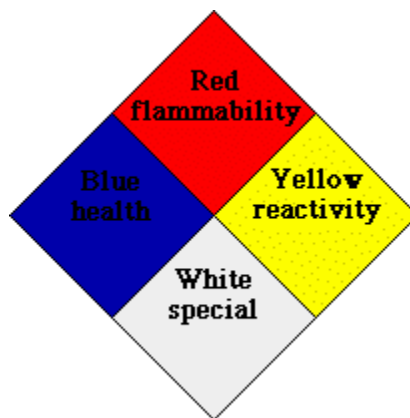
8.0 APPENDICES:

- Appendix A –NFPA 704 Diamond
- Appendix B – HMIS Label

National Fire Protection Association (NFPA) 704 Diamond

The NFPA 704 diamond is a fire protection system designed to provide rapid, clear information to emergency responders on materials under conditions of fire, chemical spills, and other emergencies.

- It addresses health, flammability, instability, and related hazards that may be presented as short term, acute exposures that are most likely to occur as a result of fire, spill, etc.
- Its objectives are to provide appropriate signals to the types of hazards present.

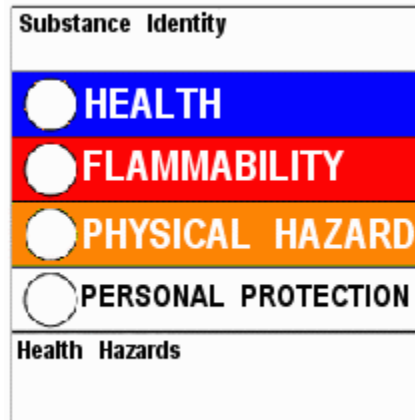


- The NFPA 704 system for identifying hazards and their severity is a standardized color coded diamond representing four different hazards and numbers to rank the degree for each type of hazard.
Blue=Health
Red=Flammability
Yellow= Reactivity
White=Special hazards such as water reactive or corrosivity

4=Extreme hazard
3=Serious hazard
2=Moderate hazard
1=Slight hazard
0=No or minimal hazard

Hazardous Materials Information System Label (HMIS)

The HMIS label provides workers with at-a-glance information to identify the hazards of a chemical and the appropriate PPE if necessary.



The HMIS system is a standardized labeling system for identifying hazards and their severity by using:

- Standardized color-coded horizontal bars to represent Health, Flammability, and Physical hazards
 - numbers to rank the degree of each hazard: 4=Extreme hazard
3=Serious hazard
2=Moderate hazard
1=Slight hazard
0=No or minimal hazard
 - Letters and/or icons are used to indicate the types of PPE that is required.
 - A= Safety glasses
 - B = Safety glasses and glove
 - C = Safety glasses, gloves, and an apron
 - D=Face shield, gloves, and an apron E=Safety glasses, gloves, and a dust respirator
 - F=Safety glasses, gloves, apron and a dust respirator
 - G=Safety glasses, a vapor respirator
 - H=Splash goggles, gloves, apron, and a vapor respirator
 - I=Safety glasses, gloves, and a dust/vapor respirator
 - J=Splash goggles, gloves, apron, and a dust/vapor respirator
 - K=Airline hood or mask, gloves, full suit, and boots
 - L-Z=Custom PPE specified by employer