Southwestern University

HAZARD COMMUNICATION PROGRAM

Creating a safe living, learning and working environment
# HAZARD COMMUNICATION PROGRAM

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INTRODUCTION

Policy

Southwestern University employees and students have a right to know about the hazardous chemicals that they work with or could be exposed to, \textbf{and} what they can do to avoid injury or illness when working with these chemicals.

OSHA training and departmental consultation will be offered and provided by the Safety Office. The department will provide site specific chemical instruction in order to reduce the possibility of over-exposure.

Department Directors/Chairs are responsible for the implementation of this program. The Safety Office will periodically audit departments for compliance.

Purpose

The OSHA Hazard Communication Standard (29CFR 1910.1200) requires that all employers develop and implement a written hazard communication program. This written program describes how the OSHA Hazard Communication Standard requirements are met at Southwestern University. The purpose of this program is to ensure that:

1) All Employees/Students are aware of our Hazard Communication Program.

2) All chemical hazards and processes are evaluated by the department.

3) All hazardous chemicals used in the work place are clearly labeled and maintained, and an updated list of chemicals is available at the departmental level in the hazard communication notebook.

4) Material Safety Data Sheets (MSDSs) are available for all hazardous chemicals.

5) Employees receive information and training so that they are informed of the requirements of the OSHA Standard, are trained by their departments/supervisors about chemical hazards used in their work place, and use well established safe work practices.

6) All persons involved in non-routine work tasks are informed of the hazards of such tasks.

7) Contractors and their employees will be informed of chemical hazards before performing work in our facility; and sub-contractors will inform us of any hazardous materials brought into our facility.
SUMMARY OF HAZARD COMMUNICATION REQUIREMENTS

Employees Covered and Employee List

Our hazard communication program applies to employees/students who are exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. A list of employees, including job titles, tasks they perform, and classes of chemicals involved, will be compiled by each department and added to the haz. com. notebook. Individual student names do not need to be included (use generic heading “students”).

<table>
<thead>
<tr>
<th>Dept.</th>
<th>Job Title</th>
<th>Name</th>
<th>Room/Area</th>
<th>Task</th>
<th>Chemical Hazards</th>
</tr>
</thead>
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<tr>
<td>Physical Plant</td>
<td>Painter I</td>
<td>John Picasso</td>
<td>Paint Shop</td>
<td>Painting and clean-up of equipment</td>
<td>Paint, solvents, adhesives are toxic and flammable</td>
</tr>
<tr>
<td></td>
<td>Custodian I</td>
<td>Mary Maid</td>
<td>Custodial closets and bathrooms</td>
<td>Cleaning bathroom surfaces</td>
<td>Cleaning products - some are very corrosive (acids)</td>
</tr>
<tr>
<td>Art Dept.</td>
<td>Art Faculty</td>
<td>Mary Matisse</td>
<td>Print Shop</td>
<td>etching plates and ink plate clean-up</td>
<td>Etching compounds are very corrosive (acids). Clean-up solvents are toxic and very flammable.</td>
</tr>
<tr>
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<td>Art Students</td>
<td>Students</td>
<td>Print Shop</td>
<td>etching plates</td>
<td>Etching compounds are very corrosive (acids)</td>
</tr>
</tbody>
</table>

Department Representative responsible for implementation: Mary Matisse
Title: Professor of Art – Dept. Chair

Chemicals Covered

Hazardous chemicals are defined as those materials which possess either a physical and/or health hazard. Almost all chemicals should be inventoried and covered.

Special Exemptions and Provisions

The law has special provisions for certain specific situations. These special situations are:

1. Laboratories

Although laboratory employees are covered more specifically by the OSHA Occupational Exposure to Hazardous Work in Laboratories, the Hazard Communication Program will apply:
2. Sealed Containers

Operations such as warehousing, where Employees handle only sealed containers are generally exempt. However, the following aspects of the Hazard Communication Program will apply:
   a. Labels on incoming containers are not to be removed or defaced.
   b. MSDSs that are received with incoming containers must be kept and maintained.
   c. If requested by employees, MSDSs must be obtained and accessible.
   e. The department will provide information and training sufficient to protect employees from hazards presented by the contents of sealed containers should they spill or leak.

3. Non-routine Tasks

This section applies to jobs that are not performed on a routine basis and may involve contact with a hazardous chemical. Supervisors will determine what chemical hazards are present or may be created by the task. The Supervisor is responsible for communicating hazard or potential hazard information to employees. Employees will be informed of the hazards presented by the non-routine task and how they can/should protect themselves.
HAZARD COMMUNICATION PROGRAM

Components

- Site specific written haz. com. program notebook
  - assignment of departmental representative
  - list of covered employees

- Hazardous Chemical Inventory Lists

- Material Safety Data Sheets

- Labeling of Containers

- Departmental site/job specific instruction and Safety Office OSHA training

*Each department develops and maintains their own hazard communication notebook.*

Location

Hazard Communication Program notebooks are available to Employees/Students at the following locations:

- Physical Plant: Main Office & Campus Buildings
- Central Heating Plant: Main Office
- Generic Written Program and compliance assistance - Safety Office
- Fine Arts: Dean’s Office & Individual Studio’s
- Chemistry - FJS 348
- Biology – FJS 203

HAZARDOUS CHEMICAL INVENTORY LISTS & HAZARD REDUCTION

Supervisors will keep their hazardous chemical list up-to-date. Hazardous chemicals should be ordered through a centralized process so that new chemicals will be immediately added to the main inventory list along with its MSDS. Serious efforts shall be taken to substitute to less hazardous chemicals whenever feasible or eliminate the hazardous process if it cannot be conducted safely (due to lack of engineering controls). See page 18 for chemical inventory format.
MATERIAL SAFETY DATA SHEETS

Supervisors will obtain the MSDS for every chemical listed on their Hazardous Chemical List.

Obtaining MSDSs

Most often a chemical shipment is accompanied by an MSDS from the supplier. This is the most preferred method of obtaining a correct MSDS. If this is not available, MSDSs can be obtained from:

1. Directly requested from the manufacturer – preferred.
   
   [Note: chemical manufacturers, importers and distributors do not need to provide material safety data sheets to retail operations which have informed them that the retail distributor does not sell the product to commercial customers, or it does not open the sealed containers on their premises. However, the retail operation must provide you with the name, address and phone number of the manufacturer or distributor which can provide you with a copy of the material safety data sheet.]

2. The following World Wide Web sites:
   http://msds.pdc.cornell.edu/issearch/msdsrch.html
   http://haz/siri.org/msds/index.html

Distribution of MSDSs

When a new or revised MSDS is received by the department, copies will be placed in the Hazard Communication Program binder. The old MSDS shall not be removed or discarded until all supplies of current inventory are used.

Employee Requests for MSDSs

Employees/students are strongly encouraged to review the Material Safety Data Sheets of all products they may use that contain hazardous chemicals. Additional copies of any MSDS must be “readily available” to any employee/student upon their request. [Up to date departmental hazard communication notebook or electronic web-based system].
LABELS AND OTHER FORMS OF WARNING

General Requirements

Chemical manufacturers, importers, and distributors are required to label all containers of hazardous chemicals. The labels, tags, or markings must include:

1. Identity of the hazardous chemical
2. Name and address of the manufacturer, importer, or other responsible party
3. Appropriate hazard warnings including: health hazards, physical hazards, target organs and effects, and personal protective equipment required

All hazardous material containers delivered to the work place must have appropriate labels. If a container is not labeled, a request must be sent to the manufacturer for a proper label by the department/supervisor using that product.

Labels on incoming containers of hazardous materials shall not be removed or defaced.

Solid Metal

Suppliers of solid metal materials that may emit hazardous substances when worked upon are required to supply labels with the first shipment of that material.

In-house Labeling System

When materials are transferred from a labeled container to another container, the receiving container must be labeled. Any labels developed in-house will derive their information from the original labels and/or the Material Safety Data Sheets. It will be the responsibility of department and transferor to properly label in-house labels (see Labels and Other Forms of Warning, General Requirements).

Labeling of Portable Containers

Portable containers into which hazardous chemicals have been transferred, technically need not be fully labeled “if that container is used immediately” (within one day, not stored overnight and used {under the direct observation} only by that employee who performed the transfer and is aware of the hazards and content of the original container). In an effort to prevent an accident or unintentional exposure, SU recommends all secondary/portable containers be labeled with the name of the contents and the hazard warning information.
Stationary Containers

For processes using in-house stationary containers, such as above ground gas tanks, signs or placards may be used in lieu of labels as long as the signs and placards meet the labeling requirements. Operating procedures, process sheets, batch tickets, and other written materials can be used as substitutes for individual container labels on stationary process equipment. These written materials must contain the same information as required on the labels and must be readily accessible to the Employees. Pipes and piping systems very near these tanks/containers do not have to be labeled; however, hazard information about the hazardous chemicals within those pipes/systems, must be on file in the MSDS central file (Haz. Com. Notebook).

Labeling of Pipes/Systems

Pipes and systems containing hazardous chemicals shall be labeled showing the contents and hazards of the chemical wherever these pipes/systems are accessible. Employees who routinely work in these areas shall be informed of the potential hazards.

Training Requirements

All Employees/Students are to receive training on any in-house labeling system so that they can interpret and understand the labels and information provided. This training will be provided by Supervisors/Departments.

Updating Labels

The Supervisor is responsible for reviewing and updating label information when new and significant information is found. This information can be extracted from revised MSDSs provided for incoming hazardous materials.
Basic NFPA hazcom label only provides summary information. May be appropriate for chemistry students/staff who have a good knowledge of chemicals and associated hazards from classroom instruction.
Example of labeling an art class chemical with a good hazcom label
Example of labeling requirement for secondary containers
Dept. contacted vendor and requested extra copies of original product label
HAZARD DETERMINATION POLICY

Chemical manufacturers and importers are required to evaluate the hazards of chemicals which they manufacture. These health hazard determinations are to be based upon scientific evidence. The evidence must be statistically significant and must be based on at least one positive study conducted in accordance with established scientific principles. This health hazard information will appear on the material safety data sheet. The Hazard Communication Standard requires that chemical manufacturers, importers, and distributors provide MSDS for their hazardous chemicals. It is our policy to rely on the MSDS’s we receive for information concerning the hazardous chemicals we work with.

For determination of the hazards of mixtures of chemicals, if a mixture has not been tested as a whole to determine whether the mixture is a health hazard, the mixture shall be assumed to present the same health hazards as do the components which comprise one percent (by weight or volume) or greater of the mixture. If the mixture has not been tested as a whole to determine whether the mixture is a physical hazard, the available scientifically valid data will be used to evaluate the physical hazard potential of the mixture.

HAZARDOUS CHEMICAL EXEMPTIONS

The following substances are exempt from the Hazard Communication Standard and, therefore, a hazard determination may not be performed for the following products:

a. Hazardous waste - subject to regulations issued by the Environmental Protection Agency – [RCRA]
b. Tobacco or tobacco products
c. Wood or wood products
d. Articles which would not emit a hazardous substance if worked upon
e. Foods, drugs, cosmetics or alcoholic beverages packaged for consumers
f. Food, drugs, or cosmetics for personal consumption
g. Consumer cleaning products (hazardous substances) only if used in the same manner, frequency and duration as does the general public. Manufacturer labels and warning statements are still required.
h. Solid drugs such as tablets, capsules, and pills
EMPLOYEE INFORMATION AND TRAINING POLICY

A combination of audiovisual and written materials is used for informing and training. Employees are informed of the location of the written hazard communication notebook, hazardous chemical inventory list, MSDSs, how they can obtain a copy of an MSDS and how to read and understand a MSDS. Employees and students are to be informed by their department and/or supervisor of the hazards of the chemicals they work with and how they can protect themselves from over-exposure.

Our training program consists of two parts:

1. Initial site/job specific training/instruction is provided by the Supervisor/Lab Instructor (follow checklist on page 15).
2. OSHA classroom training is provided by the Safety Office (page 16) at the request of the department.

Employees Requiring Training

The determination of which employees will be selected to receive Hazard Communication Training will be based upon their exposure. Those employees who have potential as well as actual exposure to hazardous chemicals will receive training. Employees who do not work with hazardous chemicals will not be required to attend Hazard Communication Training. For example, most administrative positions.

The Hazard Communication Standard has special training provisions for personnel who handle sealed containers of hazardous chemicals and for laboratory personnel. Laboratory “employees” are also covered by the OSHA Laboratory Standard.

Site or process specific training by the department/supervisor should be given when:

1. A new employee starts work.
2. An employee is transferred to a department that uses different hazardous materials.
3. A new chemical hazard is introduced into the work place.
4. New information becomes available for a substance already in use.
DEPARTMENTAL HAZCOM INSTRUCTION CHECKLIST

1. Distribute to the Employee/Student:
   • A copy of this checklist □
   • Introduction to the Hazard Communication Program (page 3) □

2. Inform Employees of the location of the Hazard Communication Notebook, which includes the departmental job titles and names of affected employees, full chemical inventory list, material safety data sheets, and the site specific written hazard communication program. □

3. Explain how to interpret a MSDS for a chemical used in your work area. □

4. Inform the Employee/Student about labeling systems in use in the work area. □

5. Inform the Employee/Student about any hazardous chemicals or processes used in the work area. Include at least the following:
   □
   • Methods used to determine the chemical's presence or release in the work area
   • Any physical or health hazards associated with the chemicals
   • Any personal protective equipment or procedures required to protect themselves, how and where to obtain the PPE, proper use of the PPE, and any emergency procedures
   • Review “Hazardous Product Purchasing Guide” and use preferred chemicals and vendors

6. Inform the Employee (does not apply to students) of the requirement for attendance at the formal OSHA Hazard Communication training program given by the Safety Office. □

7. Complete & sign (both supervisor and employee/student) this Hazard Communication Initial Instruction Checklist. □

Supervisor: ___________________________

Employee/Student Worker: ___________________________

Date: ___________________________

Lab instructor may attach a class sign-in log in lieu of individual signed copies for students.
HAZARD COMMUNICATION TRAINING PROGRAM

This program is presented by the Safety Office to [new] employees who may be exposed to hazardous chemicals in their work area.

Rights & Requirements of the Hazard Communication Standard

Audiovisual Program: Chemical Hazards

- Chemical hazard classes: corrosive, reactive, toxic, flammable
- Routes of entry: absorption, ingestion, inhalation
- Concept of dose / exposure
- Threshold limit value - TLV and PEL
- Health effects: acute and chronic
- Carcinogens
- How to detect presence of chemicals - odor, sight, burning of eyes or respiratory tract, air sampling, monitoring devices
- Reading labels
- MSDS, discussed section by section – how to interpret
- Control measures - elimination, substitution, ventilation, personal protective equipment
- Federal Hazard Communication Standard

Question and Answer Period
MULTIPLE EMPLOYER COORDINATION POLICY

Occasionally it will be required that an outside employer or a contractor perform operations at our facility. These outside agencies who produce, use, or store hazardous chemicals at our facility may expose our employees to the chemicals they bring on site. The reverse condition may occur where these outside agencies may have their employees exposed to chemicals that we keep on our premises. It is our position that all persons on our premises are entitled to information regarding the chemicals to which they are exposed in their work areas.

To this end, the Safety Office in conjunction with Facilities Management/Physical Plant will coordinate the distribution of information between Southwestern University and any outside employers or contractors. This exchange of information is limited to those situations where an outside employer's employees may be exposed to chemicals.

Contractors are requested to have available a list of the chemicals used by the contractor while at Southwestern University. Contractors shall make MSDS’s available immediately on request.
### Sample Chemical Inventory List in Excel

Department: Physical Plant - Custodial  
Location: Cullen Bldg.

<table>
<thead>
<tr>
<th>Product</th>
<th>Chemical</th>
<th>Location</th>
<th>Quantity</th>
<th>CAS#</th>
<th>Hazard Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolex Cleaner</td>
<td>Hydrogen chloride</td>
<td>Custodial closet # 112</td>
<td>1 quart</td>
<td>7647-01-1</td>
<td>Corrosive – acid</td>
</tr>
<tr>
<td>Bolex Cleaner</td>
<td>Hydrogen chloride</td>
<td>Custodial closet # 200</td>
<td>1 quart</td>
<td>7647-01-1</td>
<td>Corrosive – acid</td>
</tr>
<tr>
<td>4 – Sure Cleaner</td>
<td>Phosphoric acid</td>
<td>Custodial closet # 112</td>
<td>1 gallon</td>
<td>7664-38-2</td>
<td>Corrosive - acid</td>
</tr>
</tbody>
</table>
Departmental HazCom Implementation Guide

Department: ___________________________
Date Started: ________________

☐ 1. Read & Review SU Written Hazard Communication Program
   a. Designate a department representative responsible for the overall coordination and implementation of the site specific hazcom program. Representative will be the main contact to work with the Safety Office for assistance and auditing for compliance.
   b. Dept. Representative: ______________________________
   c. Phone #: __________________

☐ 2. Compile Departmental Hazard Communication Notebook
   a. Compile a list of employee titles and names (including student workers) that have contact with hazardous chemicals. See page 4 and use same format in excel spreadsheet. Keep list up to date with new hires/retired staff. This should be the first section of your notebook.
   b. Complete a full chemical inventory. See page 18 and use same format in excel spreadsheet. Keep inventory up to date (add new chemicals purchased). This should be the next section in your notebook.
   c. Ensure all containers of hazardous chemicals are properly labeled (chemical name, manufacturer name and address, hazard warning statement and/or symbols) and labels are maintained in a clear legible condition.
   d. Ensure MSDS’s for all hazardous chemicals are available in the haz. com. notebook or are readily accessible by web based system. This should be the third section in your notebook.
e. Ensure all flammable materials are properly stored in flammable storage cabinets. Keep all flammable materials (boxes, etc) away.

f. Ensure safe storage of compatible chemicals.

g. Ensure a process is established for clearly labeling peroxide forming chemicals with date received, date opened, and pre-determined disposal date. **Dispose of peroxide forming chemicals as hazardous waste prior to disposal date.**

h. Ensure notebook is completed with a copy of the written hazard communication program. This should be the fourth section.

3. Ensure all affected employees have attended OSHA haz. com. training session. Refer to employee titles and names listed in 2 (a).

   a. Dept. is responsible to schedule training with Safety Office

4. Ensure hazard communication departmental instructions are provided to all affected staff/student workers/students.

   a. Use and complete “Departmental Instruction Checklist” on page 15.

   b. Maintain permanent filing of checklists

5. Forward a copy of this completed guide to the Safety Office. Update guide as necessary.

   a. Date completed and sent: ____________________