STATE CENTER COMMUNITY COLLEGE DISTRICT

HAZARD COMMUNICATION PROGRAM

Revised March 2016

STATE CENTER COMMUNITY COLLEGE DISTRICT
FRESNO • REEDLEY • CLOVIS • MADERA • OAKHURST • WILLOW INTERNATIONAL

Table of Contents

F. Annual Review

1.0 PURPOSE

The State Center Community College District has developed the following Hazard Communication Program to ensure that its employees are aware of the hazards associated with chemical substances contained in products that may be used in the workplace. This program supplements the District's Injury and Illness Prevention Program (IIPP) and is the mechanism for compliance with the Cal/OSHA Hazard Communication Standard contained in Title 8 of the California Code of Regulations, Section 5194 (8 CCR 5194).

This program shall be reviewed and updated on an annual basis or as State and Federal regulations change.

2.0 SCOPE AND APPLICATION

The Hazard Communication Standard (HazCom) applies to all employees that may be exposed to hazardous chemicals, as defined by regulation, in the work place under the normal conditions of their employment. The Hazard Communication Plan required by the standard has been developed and adopted District-wide under the authority of the Vice Chancellor of Administration and Finance.

2.1 Responsibilities

The President / Vice Chancellor of each campus / center within the District shall have the primary responsibility for the HazCom Plan at their respective campus /center. This responsibility includes the implementation and assurances that each campus /center facility is in compliance and that all required personnel fully participate. The Vice Chancellor of Administration and Finance shall have the primary responsibility for the HazCom Plan conformance at District Offices, maintenance /operations facilities, and for maintenance / operations activities performed by the District. This responsibility includes the implementation and assurances that each District Office and maintenance / operation facility and activity is in compliance and that all required personnel fully participate. The overall safety program and responsibilities of key personnel are presented in the District's Injury Illness Prevention Program (IIPP).

2.2 Program Administrator

The District-wide HazCom Program Administrator is the District Director of Environmental Health and Safety (DEHS). The DEHS shall update this program as appropriate and will be responsible for the distribution of the updated program to senior managers on each campus. The DEHS will also be responsible for verifying that the Safety Data Sheets (SDS's) are maintained at each of the District's campuses, centers and facilities and will coordinate with department managers to ensure that those employees have received appropriate hazard communication training.

2.3 Department Managers and Supervisors

Each department manager / supervisor both certificated and classified, shall be responsible for ensuring that all chemical agents are inventoried, that the inventory is current, and that SDS's for chemical products used or stored in their work areas are maintained and are readily available for review by employees. The department manager will also be responsible for ensuring that all containers are labeled appropriately and that employees receive suitable training in this program and in the safe use of all agents brought into the workplace. The department manager will also be responsible for ensuring that Personal Protective Equipment (PPE) required by the SDS is available for employee use.

2.4 Purchasing Agent(s)

Personnel purchasing chemicals must verify that an SDS is requested from the supplier and received with each new chemical purchase. New SDS's will be forwarded to the appropriate department manager(s) for inclusion with existing SDS's, and the chemical inventory will be updated.

2.5 Employees

Each employee using chemicals should verify that an SDS is on file for each chemical used and that the chemical is listed in the chemical inventory. The user must abide by the procedures for the safe use of the chemical. Personal protective equipment, if necessary, must be available and used, and the required first-aid treatment facilities must be available as specified in the SDS.

3.0 SAFETY DATA SHEETS (SDS)

3.1 General

An SDS is a document that chemical manufacturers, distributors, and importers are required to prepare and provide to chemical product users. Employers (managers and supervisors) and employees must use the SDS to determine the risk of injury, the required safeguards, exposure limits, and first-aid or medical treatment required for each and every chemical brought into the workplace. SDS's contain the following information:

General product information, including product name, manufacturer's name, and the phone number to call for additional information

Hazardous ingredients, including common chemical or trade names and exposure limits (PELs, TLVs, or other recommended safe exposure limits)

Physical and chemical characteristics, including things like appearance and odor, boiling point, vapor pressure, etc.

Fire and explosion hazard, including flashpoint, flammability limit, and firefighting procedures

Reactivity data, including stability, incompatibility, and information for situations to avoid

Health hazard data, including routes of exposure, signs and symptoms of exposure, and emergency and first-aid procedures

Precautions for safe handling and use, including clean-up methods, disposal methods, and handling precautions

Control measures, including the types of personal protective equipment recommended when handling the chemical product, as well as special work and hygiene practices

3.2 Location

An SDS is to be obtained for each chemical product used in the workplace. SDS's will be consolidated and kept at the supervisor's office, the Dean's / Division office, store room, etc. and in any another designated location in the areas where the chemicals are used. Also, an inventory list of chemicals used at each work location shall be maintained with the SDS's.

3.3 Chemical Inventory

A chemical inventory shall be maintained for all chemicals used in the workplace. The chemical inventory will be kept with the SDS's and shall be updated when new chemicals are introduced into the workplace. Prior to the introduction of new chemicals into the workplace, the responsible supervisor should consult with the DEHS or campus industrial hygienist or the campus occupational health and safety officer.

3.4 Campus / Centers Laboratories

An up-to-date inventory for all chemicals covered by 8 CCR 5194 will be kept with the SDS binder in the immediate area where the chemicals are used or stored. If multiple locations are used for the use of storage of covered chemicals, the supervisor will maintain a master inventory list of all chemicals under his / her control. The master list and SDS binders will be maintained by the supervisor in the supervisor's office, store room, etc.

A chemical inventory will be compiled for all laboratories District-wide and will be kept in the office of the Director of Environmental Health and Safety. Each campus and center laboratory will maintain an up-to-date inventory of all chemicals used in the specific laboratory along with the corresponding SDS's. A copy of the inventory shall be available and stored along with the SDS's. A listing of the chemicals used in the area including the location of the associated SDS's shall be posted in a prominent area. All campuses and centers have adopted Chemical Hygiene Plans (CHP) in conformance with the California Code of Regulations, Section 5191 (8 CCR 5191). HazCom training requirements of 8 CCR 5194 are separate and distinct from the requirements for training on the Chemical Hygiene Plan and SDS's required by 8 CCR 5191.

4.0 LABELING

All chemical products used by campuses, centers or District Operations shall be labeled in English, listing the contents of hazardous substances and providing appropriate hazard warnings.

Manufacturers' labels shall not be removed or defaced. If a manufacturer's label is missing or inadequate, employees are required to contact their supervisor or the Program Administrator for a replacement label. Manufacturers labels should include the following:

- Product name or identifier
- Signal Word (Danger or Warning)
- Physical, Health and Environmental Statements
- Supplemental Information
- Precautionary Words and Pictograms
- First Aid Statement
- Name and Address of Manufacturer
- Phone Number

Repackaging of chemicals shall be done in conformance with the labeling requirements of 8 CCR 5194. (The employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged, or marked with either:

- The information specified under section 5194 (f)(1)(A) through (E) for labels on shipped containers; or,
- Product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.)

Repackaging includes transferring chemicals from bulk containers to "daily use containers." All repacked containers will be labeled with the product name, hazard class and other identifying information. Questions regarding proper labeling of daily use containers should be directed to the DEHS.

5.0 EMPLOYEE TRAINING

All newly hired employees, as part of their orientation will receive training in Hazard Communication Awareness. Employees will continue to receive hazard communication training via formal and informal training sessions. The training element of the Hazard Communication Standard (HazCom) applies only to employees that may be exposed to hazardous chemicals on the job under normal conditions of their workplace. The training component of the HazCom standard does not apply to those employees that do not work with or around recognized hazardous materials.

All employees that work with or around hazardous chemicals will receive specialized training to identify the nature of the hazards, methods for the proper management and control of the hazard and personal protection measures necessary before being assigned to work with the chemicals.

Specifically, employees covered by the Hazard Communication Training Program will receive an explanation of the following:

- State hazard communication regulations;
- Rights and responsibilities of employers and employees;
- Hazards associated with classes of chemical substances, such as flammables, solvents, metals, acids and caustics, reactives, and toxics;
- How to read an SDS; and locations where SDS's can be located
- How to repackage chemicals is small use quantities and how to label those containers.
- Safe work practices and personal protective equipment required for handling hazardous chemical products; and
- Location and availability of this written Hazard Communication Program.

Records of training will be maintained in by the department manager or supervisor, District HR and DEHS.

6.0 NON-ROUTINE OPERATIONS

Before beginning new or non-routine work operations, special job specific safety meetings shall be held for all affected personnel. At this meeting, the department manager, supervisor, or designated representative shall explain the hazards associated with the non-routine operation, safe work practices, and the required personal protective equipment.

Records of such safety meetings will be maintained by the department manager or supervisor.

7.0 CONTRACTOR / SUBCONTRACTOR EMPLOYEES

Contractors or subcontractors whose employees may be exposed to hazardous materials while working on District property shall be notified of the presence of such products and the location of the SDS's. District contractors or subcontractors will also be informed of the manufacturers' suggested protective measures, the District's Hazard Communication Program and the location of SDS's.

Alternatively, District employees should be notified of any chemical used by a contractor or subcontractor which could affect the work environment. District employees should be informed of the manufacturer's suggested protective measures and be supplied with a copy of the SDS for that substance. For any Contractor /Subcontractor, the District will ensure that they as employers have a Hazard Communication Program, or that they are given a copy of the Districts program for their work on District locations.

Safety Data Sheet (SDS)

Introduction
The Safety Data Sheet (SDS) is a detailed information bulletin prepared by the manufacturer or importer of a chemical that describes the physical and chemical properties, physical and health hazards, routes of entry, precautions for safe handling and use, emergency and first-aid procedures, and control measures. Information on an SDS aids in the selection of safe products and helps prepare employers and employees to respond effectively to daily exposure situations as well as to emergency situations.

The SDS provides a comprehensive source of information for all types of District employees. There may be information on the SDS that is not useful to you or not important to the safety and health in your particular operation. Concentrate on the information that is applicable to your situation. Generally, hazard information and protective measures should be the focus of concern.

Appendix C contains a glossary of terms used on SDS's. Some supervisors and employees who are not very familiar with chemical terminology may find this helpful in reading and understanding SDS's.

Cal/OSHA Requirements
Employers must maintain a complete and accurate SDS for each hazardous chemical that is used in the facility. They are entitled to obtain this information automatically upon purchase of the material. When new and significant information becomes available concerning a product's hazards or ways to protect against the hazards, chemical manufacturers, importers, or distributors must add it to their SDS within three months and provide it to their customers with the next shipment of the chemical. Employers must have an SDS for each hazardous chemical used in the workplace.

If there are multiple suppliers of the same chemical, there is no need to retain multiple SDS's for that chemical.

While SDS's are not required to be physically attached to a shipment, they must accompany or precede the shipment. When the manufacturer / supplier fails to send an SDS with a shipment labeled as a hazardous chemical, the employer must obtain one from the chemical manufacturer, importer, or distributor as soon as possible. Similarly, if the SDS is incomplete or unclear, the employer should contact the manufacturer or importer to get clarification or obtain missing information.

When an employee is unable to obtain an SDS from the binder or from a supplier or manufacturer, he / she should submit a request to the DEHS, with complete background information. The DEHS may then, call or send a certified letter to the supplier or manufacturer to obtain the needed information.

Required Elements of an SDS
Information in the SDS is presented using the following 16 headings in the order given below

1. Identification
2. Hazard(s) identification
3. Composition/information on ingredients
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and Storage
8. Exposure controls/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information

SDS Content
SDSs should provide a clear description of the data used to identify the hazards. The minimum information for each section listed below should be included. If specific information is not applicable or not available under a particular sub-heading, the SDS should clearly state this. Some subheadings are national or regional in nature and SDSs should contain such information as is relevant for the area the SDSs are intended.
Annex 4 contains guidance on SDS preparation

Minimum Information for an SDS

1. Identification of the substance or mixture and of the supplier
a) GHS Product Identifier
b) Other means of identification
c) Recommended use of the chemical and restrictions on use
d) Supplier's details (including name, address, phone number etc.)
e) Emergency phone number

2. Hazard identification
a) GHS classification of the substance/mixture and any national or regional information
b) GHS label elements, including precautionary statements. (Hazard symbols may be provided as a graphical reproduction of the symbols in the black and white or the name of the symbol e.g. "flame", "skull and crossbones");
c) Other hazards which do not result in the classification (e.g. "dust explosion hazard") or are not covered by the GHS.

3. Composition/information on ingredients

Substance
a) Chemical identity;
b) Common name, synonyms, etc.;
c) CAS number and other unique identifiers
d) Impurities and stabilizing additives which are themselves classified and which contribute to the classification of a substance.
Mixture
The chemical identity and concentration or concentration ranges of all ingredients which are hazardous within the meaning of the GHS and are present above their cut-off levels.
NOTE: For information on ingredients, the competent authority rules for CBI take priority over the rules for product identification.

4. First aid measures
a) Description of necessary measures, subdivided according to the different routes of exposure, i.e. inhalation, skin and eye contact and ingestion;
b) Most important symptoms/effects, acute and delayed.
c) Indication of immediate medical attention and special treatment needed, if necessary.

5. Fire-fighting measures
a) Suitable (and unsuitable) extinguishing media.
b) Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products).
c) Special protective equipment and precautions for fire-fighters.

6. Accidental release measures
a) Personal precautions, protective equipment and emergency procedures.
b) Environmental precautions.
c) Methods and materials for containment and cleaning up.

7. Handling and storage
a) Precautions for safe handling.
b) Conditions for safe storage, including any incompatibilities.

8. Exposure controls/personal protection
a) Control parameters e.g. occupational exposure limit values or biological limit values.
b) Appropriate engineering controls.
c) Individual protection measures, such as personal protective equipment.

9. Physical and chemical properties
a) Appearance (physical state, color etc.);
b) Odor;
c) Odor threshold;
d) pH;
e) Melting point/freezing point;
f) Initial boiling point and boiling range;
g) Flash point;

h) Evaporation rate;
i) Flammability (solid, gas);
j) Upper/lower flammability or explosive limits;
k) Vapor pressure;
l) Vapor density;
m) Relative density;
n) Solubility(ies);
o) Partition coefficient: n-octanol/water;
p) Auto-ignition temperature;
q) Decomposition temperature;
r) Viscosity.

10. Stability and reactivity
a) Reactivity;
b) Chemical stability;
c) Possibility of hazardous reactions;
d) Conditions to avoid (e.g. static discharge, shock or vibration);
e) Incompatible materials;
f) Hazardous decomposition products.

11. Toxicological information
Concise but complete and comprehensible description of the various toxicological (health) effects and the available data used to identify those effects, including:
a) Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact);
b) Symptoms related to the physical, chemical and toxicological characteristics;
c) Delayed and immediate effects and also chronic effects from short and long term exposure;
d) Numerical measures of toxicity (such as acute toxicity estimates).

12. Ecological information
a) Ecotoxicity (aquatic and terrestrial, where available);
b) Persistence and degradability;
c) Bioaccumulative potential;
d) Mobility in the soil;
e) Other adverse effects.

13. Disposal information
Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

14. Transport information
a) UN number;
b) UN proper shipping name:
c) Transport hazard class(es);
d) Packing group, if applicable
e) Environmental hazards (e.g.: Marine pollutant (Yes/No));
f) Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code);

g) Special precautions which a user needs to be aware of, or needs to comply with, in connection with the transport or conveyance within or outside their premises.

15. Regulatory information
Safety, health and environmental regulations specific for the product in question.

16. Other information including information on preparation and revision of the SDS
Fill in additional information as needed.

Sample Exposure Report Form

Employee Exposure Report

Last Name: _____ First Name: _____ Middle Initial: _____

Department: _____ Title: _____ SSN: _____

Date/time of exposure: _____

Duration of exposure: _____

Location of exposure (Bldg. & Rm #): _____

Chemical/hazardous substance name(s): _____

Chemical Abstract Number(s) - CAS: _____

Trade and/or common name(s) of chemical(s) or hazardous substance(s): _____

_____

Type of exposure (e.g., inhalation, ingestion, contact) (If contact, what body part was involved?)

_____

How did exposure occur? (Use additional sheet if necessary): _____

_____

Was personal protective equipment available? _____ Yes _____ No

Was personal protective equipment used? _____ Yes _____ No

If personal protective equipment was used, what type(s)? _____

Did employee receive training/instructions prior to exposure? Explain _____

_____

Were any symptoms present at time of exposure? _____ Yes _____ No

If so, describe (attach physician's report, if applicable): _____

_____

Severity of exposure: _____ First Aid _____ Medical Treatment _____ Unknown

Describe: _____

_____

Did employee lose time from work? _____ Yes _____ No

Estimate of lost time: _____

Were other employees exposed? _____ Yes _____ No

_____

If so, list names & SSN (use additional sheet if necessary): _____

_____

_____

_____

List suggestions to prevent recurrence: _____

_____

Definitions Commonly Found in the Cal-OSHA Hazard Communication Standard or that Relate to the Contents of the Standard.

Article means a manufactured item:

1. Which is formed to a specific shape or design during manufacture.

2. Which has end use function(s) dependent in whole or in part upon its shape or design during end use.

3. Which does not release, or otherwise result in exposure to a hazardous chemical under normal conditions of use.

Chemical means any substance, or mixture of substances.

Chemical manufacturer means an employer with a workplace where chemical(s) are produced for use or distribution.

Chemical name means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name that will clearly identify the chemical for the purpose of conducting a hazard classification.

Classification means to identify the relevant data regarding the hazards of a chemical; review those data to ascertain the hazards associated with the chemical; and decide whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

Commercial account means an arrangement whereby a retail distributor sells hazardous chemicals to an employer, generally in large quantities over time and/or at costs that are below the regular retail price.

Common name means any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

Container means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

Designated representative means any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

Director means the Director of Industrial Relations, California Department of Industrial Relations

Distributor means a business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.

Employee means a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers or bank tellers who encounter hazardous chemicals only in non-routine, isolated instances are not covered.

Employer means a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

Exposure or exposed means that an employee is subjected to a hazardous chemical in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.), and includes potential (e.g. accidental or possible) exposure.

Foreseeable emergency means any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.

Hazard category means the division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.

Hazard class means the nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

Hazard not otherwise classified (HNOC) means an adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes addressed in this section. This does not extend coverage to adverse physical and health effects for which there is a hazard class addressed in this section, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA (e.g., acute toxicity Category 5).

Hazard statement means a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

Hazardous chemical means any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

Health hazard means a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to §1910.1200 -- Health Hazard Criteria.

Immediate use means that the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

Importer means the first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or employers within the United States.

Label means an appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

Label elements means the specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

Mixture means a combination or a solution composed of two or more substances in which they do not react.

Physical hazard means a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. See Appendix B to §1910.1200 -- Physical Hazard Criteria.

Pictogram means a composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.

Precautionary statement means a phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.

Product identifier means the name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used shall permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label and the SDS.

Produce means to manufacture, process, formulate, or repackage.

Pyrophoric gas means a chemical in a gaseous state that will ignite spontaneously in air at a temperature of 130 degrees F (54.4 degrees C) or below.

Responsible party means someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

Safety data sheet (SDS) means written or printed material concerning a hazardous chemical that is prepared in accordance with paragraph (g) of this section.

Signal word means a word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for the less severe.

Simple asphyxiant means a substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

Specific chemical identity means the chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

Substance means chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

Trade secret means any confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it. Appendix E to §1910.1200–Definition of Trade Secret, sets out the criteria to be used in evaluating trade secrets.

Use means to package, handle, react, or transfer.

Work area means a room or defined space in a workplace where hazardous chemicals are produced or used and where employees are present.

Work place means an establishment, job site, or project, at one geographical location containing one or more work areas.

Hazard Communication Training Outline

Training for covered employees shall be conducted:

- At Initial Assignment
- Whenever New Hazards Are Introduced
- Annual Review Is Required

Information to be Included in Training Sessions

Employees must be informed of:

- Requirements of Regulations
- Any Operations in Their Areas Where Hazardous Chemicals Are Used
- Location and Availability of SDS and Plan

Training must cover:

- Method to Detect Presence of Release
- Physical and Health Hazards
- Measures for Personal Protection
- Details of Company Plan

Proposed Training Program Format

- Four Stages of Program
- Safety Data Sheets
- Marking and Labeling System
- Employee Training
- Written Plan
- Describe Programs and Procedures
- Hazard Detection
- Spill Response
- Use of Protective Equipment

Length of the Training Sessions

It may take a minimum of 30 to 45 minutes to conduct the basic hazard communication training. If there are any specific hazardous substances or situations to be trained on, the session will take longer to complete, depending on the type and number of hazardous substances.

Example of Training:

Office employees with no specific hazardous substances
30 - 45 minutes per session.

Paint shop employees with 4 specific substances to be trained on (paints, solvents, etc.)
1 to 1½ hours, depending on their training needs.

Choosing Substances for Training Purposes

Train on any substance having a Hazardous Materials Information System (HMIS) rating of...

- HEALTH: 3 or above
- FLAMMABILITY: 3 or above
- REACTIVITY: 2 or above

If none of the above choose 4 or 5 of the worst substances that you do have and use them in the training.

Comments & Suggestions

- Training is not handing out SDSs and asking employees to read.
- Training should be accompanied by a simple test with signature and filed for documentation.
- Training probably occurs in two phases.
    - General chemical safety, spill response, labeling procedure, etc; perhaps film or tape.
    - Specific workplace; specific labels, SDS's, emergency plans, etc.
- Trainers should be trained and provided with guidelines.
- If training is decentralized, periodic audits will verify that it is completed.
- Annual retraining is warranted.
- Refresher training is required when a new hazard is introduced.
- Training packages are available:
    - Computer self-paced instruction
    - Films
    - Video tapes
- There is no substitute for workplace specific training.

Hazard Communication – Test

[Please Print]
Name:_____ _____ Dept.: _____

1. SDS means? _____

_____

2. What information does the NFPA Diamonds provide? _____

_____

3. Where can you expect to see it? _____

_____

4. This training session is your required hazard communication training.

True or False (circle one)

5. Where are the SDS's kept for your department? _____

_____

_____

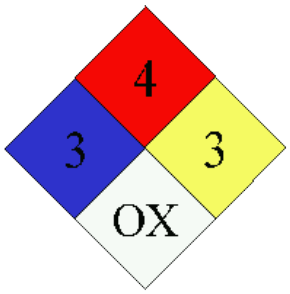
6. If you have a question about the safe use of a chemical, you can always consult:

_____

Signature: _____

Date: _____

Explanation of Chemical Labeling Systems:
Hazardous Materials Information System (HMIS) Labels
National Fire Protection Agency (NFPA) Diamonds
Uniform Laboratory Hazard Signage (UHLS)



NFPA Diamond

The National Fire Protection Association (NFPA) has developed a system for indicating the health, flammability and reactivity hazards of materials. Each diamond color represents a different type of hazard. The numerical rating inside the diamond indicates the level of hazard involved. This number indicates the severity of the hazard, with a 0 indicating no hazard and 4 indicating the most severe hazard. A special precaution symbol may be used where necessary.

Rating Summary

Health (Blue)		
4	Danger	**May be fatal on short exposure. Specialized protective equipment required**
3	Warning	**Corrosive or toxic. Avoid skin contact or inhalation**
2	Warning	**May be harmful if inhaled or absorbed**
1	Caution	**May be irritating**
0		**No unusual hazard**

Flammability (Red)		
4	Danger	**Flammable gas or extremely flammable liquid**
3	Warning	**Flammable liquid flash point below 1oo° F**
2	Caution	**Combustible liquid flash point of 1oo° to 2oo° F**
1		**Combustible if heated**
0		**Not combustible**

Reactivity (Yellow)		
4	Danger	**Explosive material at room temperature**
3	Danger	**May be explosive if shocked, heated under confinement or mixed with water**
2	Warning	**Unstable or may react violently if mixed with water**
1	Caution	**May react if heated or mixed with water but not violently**
0	Stable	**Not reactive when mixed with water**

Special Notice Key (White)

(*note the white section does NOT contain a numeric rating)

Water Reactive

OX

Oxidizing Agent

COR

Corrosive

Radioactive

HMIS Labels

The Hazardous Materials Information System (HMIS) labeling system operates on the same principle as the NFPA diamond. Blue indicates health hazard, red indicates flammability, yellow indicates reactivity, and special information (such as what personal protective equipment to wear) will be provided in the white section. It also uses a numerical system from o - 4 to indicate the severity of the hazard.

Key to HMIS Label Numerical Ratings (similar to NFPA)

HEALTH

4 Deadly: even the slightest exposure to this substance would be life threatening. Only specialized protective clothing, for these materials, should be worn.

3 Extreme Danger: serious injury would result from exposure to this substance. Do not expose anybody surface to these materials. Full protective measures should be taken.

2 Dangerous: exposure to this substance would be hazardous to health. Protective measures are indicated.

1 Slight Hazard: irritation or minor injury would result from exposure to this substance. Protective measures are indicated.

0 No Hazard: exposure to this substance offers no significant risk to health.

FLAMMABILITY

4 Flash Point Below 73ºF and Boiling Point Below 100ºF: this substance is very flammable, volatile or explosive depending on its state. Extreme caution should be used in handling or storing of these materials.

3 Flash Point Below 100ºF: flammable, volatile or explosive under almost all normal temperature conditions. Exercise great caution in storage or handling of these materials.

2 Flash Point Below 200ºF: moderately heated conditions may ignite this substance. Cautionary procedures should be employed in handling.

1 Flash Point Above 200ºF: this substance must be preheated to ignite. Most combustible solids would be in this category.

0 Will Not Burn: substances that will not burn.

REACTIVITY

4 May Detonate: substances that are readily capable of detonation or explosion at normal temperatures and pressures. Evacuate area if exposed to heat or fire.

3 Explosive: substances that are readily capable of detonation or explosion by a strong initiating source, such as heat, shock or water. Monitor from behind explosion-resistant barriers.

2 Unstable: violent chemical changes are possible at normal or elevated temperatures and pressures. Potentially violent or explosive reaction may occur when mixed with water. Monitor from a safe distance.

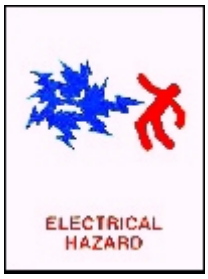
1 Normally stable: substances that may become unstable at elevated temperatures and pressures or when mixed with water. Approach with caution.

0 Stable: substances which will remain stable when exposed to heat, pressure or water.

Uniform Laboratory Hazard Signage (ULHS)

Laboratories should be marked with the appropriate pictographic symbols to warn employees, visitors, and emergency responders what precautions should be observed when entering the laboratory, as well as what hazards to expect inside.

The ULHS system identifies the areas where hazardous substances are used or stored through pictograph symbols.



Annual Review/Approval of Plan
Sign-Off Form

Program Name: _____

Date Reviewed: _____

Name & Title of Person Performing Annual Review:

_____

_____

Signature below indicates the program was reviewed and approved, as written:

_____

Program not approved, due to concerns listed below:

_____

_____

_____

_____

_____

_____

_____

_____

_____