UNIVERSITY OF WISCONSIN-STEVENS POINT HAZARD COMMUNICATION PROGRAM



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HAZARD COMMUNICATION

1.0 PURPOSE

The Hazard Communication Standard (HazCom) is based on a simple concept that employees have both a need and a right to know the hazards and identities of the chemicals that they are exposed to when working in occupational environments. The University of Wisconsin - Stevens Point follows the requirements established by the Department of Safety and Professional Services (SPS 335.001 to 02) as adopted from the rules issued by the OSHA Hazard Communication Standard (1910.1200).

The standard aligns with the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (also known as GHS) and provides more concise information on appropriate handling and safe use of hazardous chemicals. The purpose of the Hazard Communication Program is to reduce the potential for the occurrence of chemical-related occupational illnesses and injuries by providing a *common and coherent international approach* to classifying chemicals and communicating hazard information by providing container labeling and other forms of warning, safety data sheets (SDS) and employee training.

Classifying the potential hazards of chemicals and communicating information concerning hazards and appropriate protective measures to employees, may include but is not limited to, provisions for:

- Developing and maintaining a written hazard communication program for the workplace, including lists of hazardous chemicals present;
- Labeling of containers of chemicals in the workplace, as well as of containers of chemicals being shipped to other workplaces;
- Preparation and distribution of safety data sheets to employees;
- Development and implementation of employee training programs regarding hazards of chemicals and protective measures.

2.0 SCOPE AND APPLICATION

The Hazard Communication Program includes any chemical, which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency.

According to this program, laboratory supervisors shall;

- Ensure that labels on incoming containers of hazardous chemicals are not removed or defaced:
- Maintain any safety data sheets that are received with incoming shipments of hazardous chemicals, and ensure that they are readily accessible during each work shift to laboratory employees when they are in their work areas;
- Ensure that laboratory employees are provided information and training in accordance with the "Information and Training" section of this program;
- Ensure that any containers of hazardous chemicals leaving the laboratory are labeled and a safety data sheet is provided to distributors and other employers.

The supervisors of the employees who work in operations where **only handle chemicals in sealed containers**, which are not opened under normal conditions of use, shall;

- Ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;
- Maintain copies of any safety data sheets that are received with incoming shipments of the sealed containers of hazardous chemicals;
- Obtain a safety data sheet as soon as possible for sealed containers of hazardous chemicals received without a safety data sheet;
- Ensure that the safety data sheets are readily accessible during each work shift to employees;
- Ensure that employees are provided with information and training, includes the necessary information to protect employees in the event of a spill or leak of a hazardous chemical from a sealed container.

2.1 OUTSIDE CONTRACTORS

Contractors who work on campus shall have a Hazard Communication Program in place. The contractor must notify the campus about any hazardous chemicals that planning to use on university property. Also, contractors shall perform any precautionary measures that need to be taken to protect employees. Contractors shall be sure that the labeling system is in place.

Contractors must be informed for any hazardous chemicals that they may contact with or be exposed to in the project area. Both parties must have SDS for each hazardous chemical accessible during the project and provide information on their labeling systems as well as any precautionary measures that need to be taken to protect employees.

3.0 HAZARD CLASSIFICATION

For each chemical, the chemical manufacturer or importer shall determine the hazard classes. Employers are not required to classify chemicals unless they choose not to rely on the classification performed by the chemical manufacturer or importer for the chemical to satisfy this requirement.

University departments that produce a chemical that is from a collaborative research relationship and-or not obtained by an outside vendor, must create, develop and submit an SDS to the EHS chemical inventory and appropriately label the containers of the material. Also, for each chemical, the department or collaborative resource which may be defined as a chemical manufacturer or importer should define the hazard classes and where appropriate the category of each class that applies to the chemical being classified.

While classifying the chemicals, the full range of available scientific literature and other evidence concerning the potential hazards shall be identified and considered, including determinations regarding when mixtures of the classified chemicals. There is no requirement to test the chemical to determine how to classify its hazards. Appendix A - Health Hazard Criteria (Mandatory) and Appendix B - Physical Criteria (Mandatory) of OSHA 1910.1200 Hazard Communication standard shall be consulted for classification of health and physical hazards.

4.0 WRITTEN HAZARD COMMUNICATION PROGRAM

Departments who store, use or produce any hazardous chemicals shall develop, implement, and maintain, a written hazard communication program, which at least describes labels and other forms of warning, safety data sheets, and employee information and training. The written hazard communication program shall also include the following:

- A list of the hazardous chemicals known to be present using a product identifier that is referenced on the appropriate safety data sheet (the list may be compiled for each workshop and/or laboratories or as a whole department); and
- The methods that the department supervisors will use to inform employees of the hazards of non-routine tasks, and the hazards associated with chemicals contained in unlabeled pipes in their work areas.
- The methods that the department supervisors will apply to provide the other employer(s) on-site such as contractor(s) access to safety data sheets for each hazardous chemical that they may be exposed to while working;
- The methods that the department supervisors will apply to notify the other employer(s) of any precautionary measures that need to be taken to protect employees during the workplace's regular operating conditions and in predictable emergencies;
- The methods that the department supervisors will utilize to inform the other employer(s) of the labeling system used in the workplace.

The departments' supervisors can use Appendix 1 - Written Hazard Communication Program template to develop their departments' written hazard communication program.

5.0 CHEMICAL INVENTORY

Chemical inventories provide a record of room and building content which is vital in emergency situations as well as inventory control. Each campus department must complete and maintain a chemical inventory of hazardous substances present in their working areas and update it annually or as needed, as chemicals are disposed of or acquired. The inventory should include:

- The chemical name as it appears on the shipping label and SDS,
- The manufacturer's name,
- The manufacturer's address,
- The location of the chemical (building & room).

Chemical inventories must be kept with the written plan. Departments can use the online inventory system, CHEMWATCH to build a department inventory folder. CHEMWATCH User Guide also available at the EHS ChemWatch web page.

6.0 LABELS AND OTHER FORMS OF WARNING

The general requirement for labeling include:

 Labels on shipped containers: The label created and used by the manufacturer is called the shipping label. The original container must be labeled with the GHS label which includes a product identifier, signal word, hazard statements, pictogram, precautionary statements, and the name, address, and phone number of the manufacturer, importer, or other responsible parties.

Example of a GHS Shipping Label



Danger! Toxic If Swallowed, Flammable Liquid and Vapor

ToxiFlam (Contains: XYZ)



Do not eat, drink or use tobacco when using this product. Wash hands thoroughly after handling. Keep container tightly closed. Keep away from heat/sparks/open flame. – No smoking. Wear protective gloves and eye/face protection. Ground container and receiving equipment. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Store in cool/well-ventilated place.

IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician. Rinse mouth.

In case of fire, use water fog, dry chemical, CO₂, or "alcohol" foam.

See Material Safety Data Sheet for further details regarding safe use of this product

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- Solid materials: Whole grain, solid metal (such as a steel beam or a metal casting), solid wood, or plastic items are also required to be labeled because of their downstream use. The required label for solid materials should be transmitted at the time of the initial shipment or with the SDS, which is provided prior to shipment. Also, no label is needed for subsequent shipments if the information on the label does not change.
- Workplace labeling: For secondary containers (transferred chemicals) can be labeled
 with either the GHS label or a label that contains the identity of the chemical and words,
 pictures, symbols, or a combination that provides information about the physical and
 health hazards of the chemical. Secondary bottling, labeling, and containment should be
 kept to a minimum as a best practice.
- Labels to individual stationary process containers: Instead of a label, posting, process sheet, batch ticket, placard, or sign may be used on stationary process containers, pipes, or piping systems. The identity of the hazardous chemical and appropriate hazard warning must be included.
- Container for use by one person: A portable container, which is filled from a labeled container for the employee's immediate use during that work shift, will be used by the same employee, will not be left unattended by that employee, and will be used entirely, need not be labeled. All transfer and handling of chemicals through campus hallways must be accomplished by a secondary container, either a rubber-handled container or by a cart with sides to accommodate any spillage.
- Never deface or remove any container labels. Ensure labels remain affixed.

- Labels and other forms of warning must be legible, prominently displayed and in English. Employers having employees who speak other languages may add the information in their language as long as the information is presented in English as well.
- Labeling on Chemistry and Biology lab doors is required. The labeling can be obtained from the campus Chemical Hygiene Officer, Risk Management.

7.0 SAFETY DATA SHEETS (SDS)

Chemical manufacturers and importers must obtain or develop an SDS for each hazardous chemical they produce or import in English (other languages may also be included if appropriate). SDS are detailed informational documents of hazardous chemicals that define the physical and chemical properties of the product and is planned to provide end-users in laboratories, workers, and emergency personnel with consistent and readily understandable information regarding safe procedures for handling, storage, disposal, protective equipment, and spill and emergency response.

With the revised HCS, SDS are standardized and presented in a 16-section format that is used and recognized globally. These 16-sections include;

Section 1, Identification includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

Section 2, Hazard(s) identification includes all hazards regarding the chemical; required label elements.

Section 3, Composition/information on ingredients includes information on chemical ingredients; trade secret claims.

Section 4, First-aid measures include important symptoms/effects, acute, delayed; required treatment.

Section 5, Fire-fighting measures lists suitable extinguishing techniques, equipment; chemical hazards from fire.

Section 6, Accidental release measures lists emergency procedures; protective equipment; proper methods of containment and cleanup.

Section 7, Handling and storage lists precautions for safe handling and storage, including incompatibilities.

Section 8, Exposure controls/personal protection lists OSHA's Permissible Exposure Limits (PELs); ACGIH Threshold Limit Values (TLVs); and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the SDS were available as well as appropriate engineering controls; personal protective equipment (PPE).

Section 9, Physical and chemical properties lists the chemical's characteristics.

Section 10, Stability and reactivity lists chemical stability and the possibility of hazardous reactions.

Section 11, Toxicological information includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information*

Section 13, Disposal considerations*

Section 14, Transport information*

Section 15, Regulatory information*

Section 16, Other information, includes the date of preparation or last revision.

*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15 (29 CFR 1910.1200(g)(2)).

Where complex mixtures have similar hazards and contents (i.e. the chemical ingredients are essentially the same, but the specific composition varies from the mixture to mixture), the chemical manufacturer or importer may prepare one safety data sheet to apply to all of these similar mixtures.

If the chemical manufacturer or importer preparing the safety data sheet becomes newly aware of any significant information regarding the hazards of a chemical, or new ways to protect against the hazards, this new information shall be added to the safety data sheet within three months.

All employees who work with hazardous chemicals must be able to readily access an updated SDS during each work shift from their work areas. Electronic access and other alternatives to maintaining paper copies of the safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options. So departments may create their own SDS folder(s) on UW-Stevens Point chemical inventory online program ChemWatch which available on the Risk Management home page as well as the EHS ChemWatch web page.

8.0 TRAINING

Each UW - Stevens Point employee must be provided with information and training on the hazardous chemicals they work with upon their initial assignment, non-routine tasks, and whenever a new chemical is introduced. The information must include any operations in their work area where hazardous chemicals are present, the location of the written hazard communication program, chemical inventory, and SDS. In-person training for all laboratory users is available at the beginning of each semester and online training is available on Risk Management – EHS online training page for all campus employees.

Before starting to work with hazardous chemicals and whenever a new chemical is introduced, each employee must receive the following training:

- The details of the hazard communication program, including an explanation of the labels received on shipped containers and the workplace labeling system. Location of the written hazard communication program.
- How to read and interpret an SDS including the order of information and the physical as well as health hazards. Location of the SDS.

- How to detect the presence or release of a hazardous chemical and work practices that may result in an exposure.
- The physical, health, simple asphyxiation, combustible dust, and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals in the work area.
- The measures that employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
- The details of the UW-Stevens Point hazard communication program, including an explanation of the labels received on shipped containers and the workplace labeling system used by the UW-Stevens Point; the safety data sheet, including the order of information and how employees can obtain and use the appropriate hazard information.

8.1 Non-Routine Tasks

When employees are required to perform non-routine tasks with hazardous chemicals, training must be conducted to inform the employees of the physical, health, asphyxiation, combustible dust, and pyrophoric gas hazards of the chemicals. Training also must include necessary precautions and Personal Protective Equipment (PPE), first aid, emergency, and spill procedures as well as methods to detect the release or presence of hazardous chemicals.

Sample Hazard Communication Program

(Please complete or remove the highlighted areas of the program to customize plan)

(Name of Agency/Institution/University Campus)

(Date)

1. Introduction

The management of (Name of Agency/Institution/University Campus) is committed to preventing accidents and ensuring the safety and health of our employees. We will comply with all applicable federal and state health and safety rules. Under this program, employees are informed of the contents of the OSHA Hazard Communications Standard, the hazardous properties of chemicals with which they work, safe handling procedures and measures to take to protect themselves from these chemicals. These chemicals may be physical or health-related. This written hazard communication plan is available at the following location for review by all employees: (Location Names.)

2. Identifying Hazardous Chemicals

A list is attached to this plan that identifies all hazardous chemicals with a potential for employee exposure at this workplace. (Attach list). Detailed information about the physical, health, and other hazards of each chemical is included in a Safety Data Sheet (SDS); the product identifier for each chemical on the list matches and can be easily cross-referenced with the product identifier on its label and on its Safety Data Sheet.

3. Identifying Containers of Hazardous Chemicals

The labeling system to be used by **(Name of Agency/Institution/University Campus)** will follow the requirements in the 2012 revision of the OSHA Hazard Communication Standard to be consistent with the United Nations Globally Harmonized System (GHS) of Classification of Labeling of Chemicals. The label on the chemical is intended to convey information about the hazards posed by the chemical through standardized label elements, including symbols, signal words and hazard statements.

All hazardous chemical containers used at this workplace will have:

- 1. The original manufacturer's label that includes a product identifier, an appropriate signal word, hazard statement(s), pictogram(s), precautionary statement(s) and the name, address, and telephone number of the chemical manufacturer, importer, or other responsible parties
- 2. A label with the appropriate label elements just described
- 3. Workplace labeling that includes the product identifier and words, pictures, symbols, or combination that provides at least general information regarding the hazards of the chemicals.

(Name of person or job title) will ensure that all containers are appropriately labeled. No container will be released for use until this information is verified. Workplace labels must be legible and in English. Information in other languages is available at: (Identify the location if they are stored in a paper file. Describe how to access this information.)

Small quantities intended for immediate use may be placed in a container without a label, provided that the individual keeps it in their possession at all times and the product is used up during the work shift or properly disposed of at the end of the work day. However, the container should be marked with its contents.

4. Keeping Safety Data Sheets (previously known as Material Safety Data Sheets)

The manufacturer or importer of a chemical is required by OSHA to develop a Safety Data Sheet (SDS) that contains specific, detailed information about the chemical's hazard using a specified format. The distributor or supplier of the chemical is required to provide this SDS to the purchaser.

SDS's are readily available to all employees during their work shifts. Employees can review SDS for all hazardous chemicals used at this workplace. (Identify the file location if they are stored in a paper file. Describe how to access them if they are stored electronically).

The SDS's are updated and managed by (name of person or job title responsible for managing the Safety Data Sheets). If a SDS is not immediately available for a hazardous chemical, employees can obtain the required information by calling (name of person or job title responsible for providing information in an emergency).

5. Training Employees about Chemical Hazards

Before they start their jobs or are exposed to new hazardous chemicals, employees must attend a hazard communication training that covers the following topics:

- An overview of the requirements in OSHA's Hazard Communication Standard.
- Hazardous chemicals present in their workplace.
- Any operations in their work area where hazardous chemicals are used.
- The location of the written hazard communication plan and where it may be reviewed.
- How to understand and use the information on labels and in Safety Data Sheets.
- Physical and health hazards of the chemicals in their work areas.
- Methods used to detect the presence or release of hazardous chemicals in the work area.
- Steps we have taken to prevent or reduce exposure to these chemicals.
- How employees can protect themselves from exposure to these hazardous chemicals through use of engineering controls/work practices and personal protective equipment.
- An explanation of any special labeling present in the workplace. o What are pictograms?
 - o What are the signal words?
 - o What are the hazard statements?
 - o What are the precautionary statements?
- Emergency procedures to follow if an employee is exposed to these chemicals.

(Name of person or job title responsible for managing the training program) is responsible to ensure that employees receive this training. After attending the training, employees will sign a form verifying that they understand the above topics and how the topics are related to our hazard communication plan.

Prior to introducing a new chemical hazard into any department, each employee in that department will be given information and training as outlined above for the new chemical hazard.

6. Informing Employees who do Special Tasks

Before employees perform special (non-routine) tasks that may expose them to hazardous chemicals, their supervisors will inform them about the chemicals' hazards. Their supervisors also will inform them about how to control exposure and what to do in an emergency. The employer will evaluate the hazards of these tasks and provide appropriate controls including Personal Protective Equipment all additional training as required.

Examples of special tasks that may expose employees to hazardous chemicals include the following: (include examples of special (non-routine) tasks).

7. Informing contractors and other employers about our hazardous chemicals

If employees of other employer(s) may be exposed to hazardous chemicals at our workplace (for example, employees of a construction contractor working on-site) It is the responsibility of (name of person or job title) to provide contractors and their employees with the following information:

- The identity of the chemicals, how to review our Safety Data Sheets, and an explanation of the container labeling system.
- Safe work practices to prevent exposure.

(Name of person or job title) will also obtain a Safety Data Sheet for any hazardous chemical a contractor brings into the workplace.

HCS Pictograms and Hazards



- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity



- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides



- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

Gas Cylinder



Gases Under Pressure

Corrosion



- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals

Exploding Bomb



- Explosives
- Self-Reactives
- Organic Peroxides

Flame Over Circle



Oxidizers

Environment (Non-Mandatory)



Aquatic Toxicity

Skull and Crossbones



 Acute Toxicity (Fatal or Toxic)