

## Hazard Communication Program (HAZCOM) Guide

This guidance document describes the requirements of the Occupational Safety and Health Administration's (OSHA) Hazard Communication Program as outlined in [29 CFR 1910.1200](#).

The UMaine Hazard Communication Program document is available on the SEM website and provides the regulatory framework for Hazard Communication at the University.

Complying with the requirements of Hazard Communication involves three basic steps:

- Identifying, inventorying, and labeling all hazardous chemicals used;
- Obtaining and providing access to Safety Data Sheets (SDS); and,
- Training employees about the hazards of the chemicals they use or are exposed to.

### Exceptions to the Hazard Communication Program

Exceptions to the Hazard Communication Program requirements briefly include: tobacco products; wood products; articles; food, alcoholic beverages, cosmetics and prescription or over-the-counter drugs intended for *personal* use by university personnel; consumer products used in the workplace in the same concentration and manner as intended for use by consumers; ionizing and non-ionizing radiation; biological hazards; hazardous waste; and, hazardous chemicals used in small quantities in accordance with the laboratory Chemical Hygiene Plan. Detail can be found on these exceptions in Section 2 of the UMaine Hazard Communication Program document.

### Hazard Identification and Evaluation (Determination)

The Hazard Communication Program requirements apply to chemicals and materials if they present a physical or health hazard. A chemical with a physical hazard means that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive), or water reactive, or other physical hazard. A chemical with a health hazard means a chemical in which statistically significant evidence indicates acute or chronic health effects may occur in exposed employees. Examples include: carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, and agents which damage the lungs, skin, eyes, or mucous membranes. The manufacturer issued Safety Data Sheet (SDS) can be consulted to evaluate a chemical's properties. The Safety and Environmental Management Department (SEM) is available to help with questions about the hazards of chemicals.

### Responsibilities

It is the responsibility of the supervisor of the work area that uses hazardous chemicals to keep track of the chemicals in the form of an inventory, maintain SDS files, assess the potential hazard(s) posed to their workers, ensure hazardous chemicals are labeled, and to train the workers about these hazards. Employees must abide by the requirements of the hazard communication program and report and observed problems to their supervisor. Additionally, employees must utilize proper personal protective equipment (PPE).

### **Inventory of Hazardous Chemicals – The Chemical Inventory**

Complete, accurate, and up-to-date chemical inventories are required to identify and track the use of chemicals in a workplace.

**Requirement:** Perform an annual inventory of chemicals on-hand. In addition, maintain an up-to-date listing of chemicals on-hand and ensure that the inventory is readily available and accessible for all employees working around hazardous chemicals.

**Requirement:** Establish a procedure or process for ensuring that new chemicals are promptly and accurately added to the workplace inventory.

### **Safety Data Sheets**

Supervisors are required to communicate hazards of a particular chemical, routes of entry into the body, the effects of overexposure to the chemical, and how to protect themselves from exposure. Safety Data Sheets (SDS) are the most convenient and widely accepted method for communicating the hazards of a chemical to an employee.

**Requirement:** Each supervisor must maintain a file of SDS' for chemicals used within their area. The SDS file must be accessible to all employees during their work hours. For new products, the SDS must be obtained prior to the use of the product by any employee.

### **Labeling of Containers of Hazardous Chemicals**

All containers of chemicals and materials used in the workplace must be labeled.

**Requirement:** Hazardous chemicals/materials placed into secondary containers must meet various labeling requirements. Specifically, the label of these containers must contain:

- The identity of the product or the ingredients of a mixture that will allow SDS' to be obtained when needed;
- Information regarding the hazards of the chemical or materials, examples include: health hazards; reactivity hazards; flammability hazards; and, required personal protective equipment; and,
- Any other necessary physical or health hazards not covered above.

Hazardous Materials Information System (HMIS) label is the UMaine label of choice for all secondary containers. It is presented below. Other labeling systems, such as NFPA, may be used, provided that employees are properly trained in their use.



Figure 1 - HMIS Label

**Other Requirements:**

Hazardous chemicals shall be separated from eating and drinking areas, in order to prevent possible ingestion of chemicals and no employee, student or visitor shall be allowed to consume or store food or beverages in any area exposed to hazardous chemicals. Additionally, no food or beverage consumption will be stored in a refrigerator or freezer where chemicals, biohazards, radioactive or other hazardous processes are stored. Food or beverages must not be placed in a microwave oven or other heating device that is used to conduct hazardous processes. Supervisors are responsible for identifying and labeling areas exposed to chemicals with “NO EATING OR DRINKING PERMITTED IN THIS AREA” signs.

- Refrigerators, freezers and microwaves used for the storage or processing of hazardous, toxic, biohazard or radioactive products shall be labeled with wording that positively identifies that the equipment’s use is restricted. Words such as “CHEMICAL STORAGE ONLY” or “CHEMICAL PROCESSING ONLY,” are appropriate.
- Food containers are not appropriate for the storage of hazardous materials or chemicals.

**Employee Awareness and Training**

Each work area trains their employees on the specific hazardous materials or chemicals in their departmental work area. General training is available online. Supervisors may find an effective and efficient way to meet these requirements is during *Department Annual Safety Training*.

Information and training on hazardous chemicals must be provided to an employee:

- at the time of initial assignment, or when new tasks are assigned utilizing or exposing the employee to a hazardous chemical for which training has not been received; or,
- when a new hazardous chemical is introduced into the workplace.

Information and training may be designed to cover categories of hazards such as: flammability; toxicity; carcinogenicity; or specific chemicals used in the work area.

**Routine Training Requirement:** Information and training must be provided to employees working with or around hazardous chemicals and materials. Supervisors must:

- Describe the location and availability of the chemical inventory list, SDS’, and where to locate/review the UMaine’s Hazard Communication Program document;
- Explain the purpose and contents of Safety Data Sheets, including detail and guidance on interpreting the hazard information and technical terms included in the typical SDS, and its intended application;
- Ensure that an employee can read and understand an SDS;
- Explain the labeling system utilized by the department and how employees can obtain and use appropriate hazard information;
- Review the methods and observations that can be used to detect the presence of hazardous chemicals, such as monitoring/instrumentation, odor, appearance;
- Assess the hazards of the chemicals or materials used and review that assessment with employees. Include protective measures for minimizing exposure such as appropriate work practices, personal protective equipment, and emergency procedures;
- Review handling, storage, and spill procedures; and,
- Review emergency and first aid procedures.

Non-Routine Training Requirement: Tasks may be performed that may expose employees to hazardous chemicals not ordinarily used in their normal work duties; including, repairs, spill cleanup, equipment repair, and annual maintenance. Prior to starting work on such projects, affected personnel must be presented information by their supervisor about hazards to which they may be exposed during the task. Training must include the same level of detail and information necessary for routinely used hazardous chemicals. The training should emphasize that the potential hazard of working with an unfamiliar material can be greater than with those that are handled routinely.

### **Documentation of Training Completed**

Requirement: Training provided to employees and others in the program must be documented with detailed records of training maintained by the department. The training records must be kept for the longer of 30 years or employment. The UMaine Safety and Environmental Management Department (SEM) prepared the following aids to help supervisors meet the requirement of documenting Hazard Communication Program training. Also, the form may be useful to the Supervisor as a checklist for completing required elements:

- SEM Form MF09002
- “Hazard Communication Program - Training Checklist”, available in the *Forms* section on the SEM website. <http://www.umaine.edu/SEM>

### **Definitions**

Chemical means any element, chemical compound or mixture of elements and/or compounds.

Hazardous Chemical means any chemical which is a physical or health hazard. Including, any chemical substance with a National Fire Protection Agency (NFPA)/Hazardous Materials Information System (HMIS) health, flammability, or reactivity rating of 2 or higher.

Health Hazard means a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term “health hazard” includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.

Physical Hazard means a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water-reactive.