

# Hazard Communication Program



# Yale *Environmental Health & Safety*

## Table of Contents

Section 1: Introduction.....	3
Section 2: Scope.....	3
2.1 Employees Covered .....	3
2.2 Laboratory Exemption .....	3
2.3 Substances Covered .....	4
Section 3: Responsibilities .....	4
3.1 General.....	4
3.2 Identification of Potentially Exposed Employees.....	4
Section 4: Document Locations .....	5
4.1 Hazard Communication Plan .....	5
4.2 Safety Data Sheets (SDS) .....	5
Section 5: Safety Data Sheets .....	5
5.1 General Information.....	5
5.2 Safety Data Sheets (SDS) .....	5
5.3 Purchasing and Receiving Procedures .....	6
5.4 Accessibility.....	6
5.5 Replacement of Safety Data Sheets .....	6
5.6 Creation of a Safety Data Sheet .....	7
Section 6: Training.....	7
6.1 Introduction.....	7
6.2 Training Materials.....	7
6.3 Training Circumstances .....	7
6.4 Hazard Communication Training Providers .....	7
6.5 Attendance Records .....	8
Section 7: Container Labeling .....	8
7.1 General Requirements.....	8
7.2 Inspection of Incoming Containers.....	8
7.3 Secondary Containers (Workplace Labeling).....	8
7.4 Placarding .....	9

# Yale *Environmental Health & Safety*

Section 8: Non-Routine Tasks .....	9
Section 9: Contractors .....	9
Appendix A: Training Program Outline – Hazard Communication .....	10

# Yale *Environmental Health & Safety*

## Section 1: Introduction

Under the Occupational Safety and Health Administration's [Hazard Communication Standard](#) (HCS), 29 CFR 1910.1200, employers must establish and maintain a program to evaluate and communicate the hazards of chemicals in the workplace. This standard requires employers to establish information and training on the hazardous properties of chemicals in the workplace, safe handling procedures, and measures to protect workers from these chemicals. The standard also addresses the labeling of chemical containers and the management of information sheets. OSHA revised this [Hazard Communication Standard](#) to align with the United Nations' [Globally Harmonized System](#) of Classification and Labeling of Chemicals (GHS) and published it in the Federal Register in March 2012. This change was made to increase the quality and consistency of chemical safety information by adopting a standardized approach to hazard classification, labels, and safety information.

This written [Hazard Communication Program](#) outlines how Yale University complies with all elements of the HCS.

## Section 2: Scope

### 2.1 Employees Covered

This Program covers personnel employed by Yale University who may be exposed to hazardous chemicals under normal operating conditions or reasonably anticipated emergencies. Employees who encounter hazardous chemicals only in non-routine, isolated instances are not covered by this Program.

### 2.2 Laboratory Exemption

This program does not apply to laboratories that use hazardous chemicals. Laboratories are defined by the following criteria:

- Chemical manipulations are carried out on a laboratory scale;
- Multiple chemical procedures or chemicals are used;
- The procedures are not part of a production process, nor do they simulate a production process; and
- Protective laboratory practices and equipment are available and in common use to minimize the potential for worker exposure to hazardous chemicals.

Laboratories meeting the above criteria are subject to OSHA's [Occupational Exposure to Hazardous Chemicals in Laboratories](#) standard (29 CFR 1910.1450). Additionally, all University laboratories are subject to the requirements of the [Chemical Hygiene Plan](#).

Laboratory personnel have been provided with information on the standard and on how to access it. They have also been made aware of the contents of the [CHP](#) and its availability in the Yale Environmental Health and Safety office and on the website (<http://ehs.yale.edu/>).

# Yale *Environmental Health & Safety*

## 2.3 Substances Covered

All substances located at Yale University that pose a physical or health hazard are included, except those specifically exempted by this Standard. Exempted substances include hazardous wastes, consumer products, and articles as defined by OSHA.

## Section 3: Responsibilities

### 3.1 General

Responsibilities for compliance with this program are as follows:

#### Yale Environmental Health and Safety (EHS)

- Developing and periodically updating the written Program;
- Developing and implementing training programs that comply with the requirements of the standard and also accommodate the needs of individual departments; and
- Provide updated information and training as necessary.

#### Individual Departments

- Ensuring that all employees receive Hazard Communication training prior to working with hazardous chemicals at their work site;
- Ensuring that all applicable containers are labeled appropriately;
- Keeping updated lists of chemicals in their work area; and
- Maintaining a current file of [Safety Data Sheets](#) (SDS) for hazardous chemicals and products used in the workplace.

#### Employees

- Attending, or completing online, required safety training;
- Reviewing and understanding chemical labels and [SDS](#) when necessary and following their instructions and warnings;
- Taking necessary precautions when handling hazardous chemicals; and
- Asking for assistance if there are any questions or concerns that have not been answered by training, container labels, or [SDSs](#).

### 3.2 Identification of Potentially Exposed Employees

Department managers, lead administrators, and area supervisors are responsible for identifying employees who may be exposed to hazardous chemicals either under normal working conditions or in reasonably anticipated emergencies. Identification of these employees may be based on various criteria, including job descriptions and supervisor recommendations. For the purposes of this program, personnel potentially exposed to hazardous chemicals often include:

- a) Facilities Operations staff, such as custodial, utilities, grounds maintenance, and physical plant trade staff.
- b) Stockroom, shipping, and receiving staff who handle hazardous chemicals.
- c) Emergency response personnel, including police, fire, and other safety personnel.

# Yale *Environmental Health & Safety*

- d) Individuals working in shops, art studios, or similar non-laboratory settings.
- e) Staff working in clinical or healthcare settings.
- f) Staff in other departments where chemical handling may occur, such as the Schools of Art & Drama, Peabody Museum conservation/collections, Hospitality, and Publishing and Printing.
- g) Personnel who regularly work in proximity to hazardous chemicals during their routine job functions.

Employees who encounter hazardous chemicals in non-routine, isolated instances, such as office or administrative staff, security personnel, mail clerks, or faculty, are not covered by this [Program](#).

## Section 4: Document Locations

### 4.1 Hazard Communication Plan

This program is available on the Yale EHS website ([ehs.yale.edu](http://ehs.yale.edu)). Printed copies of this [Program](#) can be requested by contacting Yale EHS at [ehs@yale.edu](mailto:ehs@yale.edu) or 203-785-3550.

### 4.2 Safety Data Sheets (SDS)

Each department covered by this standard must maintain [SDSs](#) for hazardous products it has or uses. These [SDSs](#) may be reviewed and printed by any employee of Yale University or their designated representative, free of charge, regardless of whether they have been exposed to that material. Yale EHS subscribes to a [safety data sheet](#) management system. All Yale personnel can access [SDSs](#) from any Yale computer through this system. The [SDS](#) Management System is available on the EHS website at <http://ehs.yale.edu/>.

## Section 5: Safety Data Sheets

### 5.1 General Information

[Safety Data Sheets](#) (SDSs) provide basic safety information about a specific chemical substance or product. The required content of these informational sheets must follow a standardized format.

### 5.2 Safety Data Sheets (SDS)

The [Hazard Communication Standard](#) requires that the information on the [SDS](#) be presented using specific headings in a specified sequence. The phrases used in [SDSs](#) are all standardized to ensure clarity and consistency between manufacturers. These [SDSs](#) must contain the following 16 sections, in this order:

- Section 1. Identification
- Section 2. Hazard(s) identification
- Section 3. Composition/information on ingredients
- Section 4. First-Aid measures
- Section 5. Fire-fighting measures

# Yale *Environmental Health & Safety*

- Section 6. Accidental release measures
- Section 7. Handling and storage
- Section 8. Exposure controls/personal protection
- Section 9. Physical and chemical properties
- Section 10. Stability and reactivity
- Section 11. Toxicological information
- Section 12. Ecological information
- Section 13. Disposal considerations
- Section 14. Transport information
- Section 15. Regulatory information
- Section 16. Other information, including date of preparation or last revision

## 5.3 Purchasing and Receiving Procedures

Vendors and manufacturers are expected to provide [SDSs](#) with the hazardous chemicals and products supplied to Yale University, including samples. New copies must be sent to the specific ordering department at Yale University whenever revisions are made to the [SDS](#). Individual departments are responsible for securing an [SDS](#) if it is not sent by the manufacturer.

## 5.4 Accessibility

- [SDSs](#) are immediately accessible to employees at all times during their work shift. University personnel can access the [SDS](#) repository, which the University subscribes to, from any Yale networked computer. This includes computers in their department and elsewhere on campus. The system allows [SDSs](#) to be organized by location and/or department. It is accessed through the EHS website at <http://ehs.yale.edu/>. All staff are trained on how to access [SDSs](#) for the chemicals they may use.
- Employees can also request [SDSs](#) by contacting their supervisor or EHS. The [SDS](#) will be provided to them during their work shift.
- Yale University will provide [SDSs](#) to all employees and to anyone who may request them, not only those who are covered by this program.
- [SDSs](#) are available to outside contractors upon request.

## 5.5 Replacement of Safety Data Sheets

Manufacturers and vendors are required to replace outdated or incorrect [SDSs](#). The University's [SDS](#) repository automatically updates [SDSs](#) with the most recent copies from manufacturers or vendors. Responsibility for the accuracy of an [SDS](#) rests solely with the originator of the [SDS](#). All [SDSs](#) must conform to the updated 16-section format required by OSHA. See Section 5.2 Safety Data Sheets (SDS).

# Yale *Environmental Health & Safety*

## 5.6 Creation of a Safety Data Sheet

If Yale University needs to create an [SDS](#), Yale EHS should be consulted for assistance. This would only be required if a University worker or student produces a new chemical and sends it elsewhere for use.

## Section 6: Training

### 6.1 Introduction

All potentially exposed employees must be given information and training on the handling and safe use of hazardous chemicals in their work area. This training is given prior to their working with hazardous chemicals and whenever a new chemical hazard is introduced into their work area.

Appendix A: Training Program Outline – Hazard Communication provides an outline of topics covered in Yale’s hazard communication training.

### 6.2 Training Materials

Yale Environmental Health and Safety offers training programs in a variety of formats to suit the audience. Hazard Communication training is offered online and also in-person, in conjunction with many annual departmental safety training programs.

### 6.3 Training Circumstances

Exposed employees must be trained under the following circumstances:

- a) All workers, covered by this standard, who are exposed to hazardous materials at work. This includes:
  - New employees
  - Transferred employees
  - Whenever new hazards are introduced into the work area
- b) Workers will receive at least their normal rate of pay to attend hazard communication training, which is provided at no expense to the employee.
- c) Hazard communication/chemical safety training is repeated department-wide on a periodic basis to many of the affected departments.

### 6.4 Hazard Communication Training Providers

Training is delivered via the following methods:

- a) Yale EHS Professional Staff
- b) Web-based training developed by Yale EHS available via Workday Learning
- c) Departmental Managers/ Supervisors/ Designated Trainers may provide this training to covered employees only after they have been trained to do so by Yale EHS or a qualified member of their department.

# Yale *Environmental Health & Safety*

## 6.5 Attendance Records

A record of attendance that includes the name, Net ID, and department of each employee attending in-person hazard communication training will be kept. Those records will be maintained by Yale EHS. Attendance for the web-based training is recorded in the e-learning module. An electronic training record is also kept for each course and is managed in Workday Learning.

## Section 7: Container Labeling

### 7.1 General Requirements

Chemical containers must have a label that meets the following requirements: be legible and in English when received from the manufacturer, or they must be rejected and returned to the manufacturer:

- a) product identifier
- b) signal word (Danger or Caution)
- c) standardized hazard statement(s)
- d) standardized precautionary statement(s)
- e) pictogram(s)
- f) name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

### 7.2 Inspection of Incoming Containers

Shipping and receiving personnel, as well as others involved in unpacking chemicals, are trained by their managers or supervisors to inspect each incoming container to ensure that it is labeled in accordance with the University's HCS regulations upon receipt. EHS should be notified of any containers that do not conform to the above requirement.

### 7.3 Secondary Containers (Workplace Labeling)

If a container label becomes illegible during use or if a hazardous chemical is transferred from its original container to a secondary container, the container must have affixed to it a copy of the original container label or a generic label completed with required information. **At a minimum, a secondary chemical container label must identify:**

- Chemical or product name
- Words, symbols, pictures, or a combination thereof, which provide at least general information regarding the chemical's physical and health hazards

The user may include other information on the label, such as the date the chemical was received, the date a container was opened (if the chemical could degrade or react over time), or any other information that may be useful.

*Exemption: Secondary containers into which hazardous chemicals are transferred from labeled containers and intended only for the immediate use of the employee who performs the transfer are*

# Yale *Environmental Health & Safety*

*exempt from labeling requirements. Once the container is left unattended, it must be properly labeled with the identity and complete hazard warning.*

## **7.4 Placarding**

The employer may use signs, place cards, batch tickets, operating procedures, or other written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the container to which it applies and conveys the required information.

## **Section 8: Non-Routine Tasks**

When an employee is to perform a non-routine task presenting hazards for which he or she has not already been trained, the employee's supervisor will be responsible for discussing with the employee the hazards of the task and any special measures, including personal protective equipment or environmental controls, that should be used to protect the employee. Yale EHS will assist with training on non-routine tasks as needed.

## **Section 9: Contractors**

Information on the requirements for outside contractors regarding the [HCS](#) is available in the Yale University [Contractor Health & Safety Guidelines \(https://ehs.yale.edu/\)](https://ehs.yale.edu/).

# Yale *Environmental Health & Safety*

## Appendix A: Training Program Outline – Hazard Communication

1. Hazard Communication Standard
  - A. Scope and Application
  - B. Components
  - C. Availability and Accessibility of Information
  - D. Details on the Following:
    - Label Elements and Requirements
    - SDS Format and Explanation on Sections
    - Pictograms
2. Chemical Hazards
  - A. Physical and Health Hazards
  - B. Acute vs. Chronic
  - C. Routes of Exposure
  - D. Signs and Symptoms of Overexposure
3. Chemical Incidents
  - A. Methods to Detect the Presence or Release of Hazardous Chemicals
  - B. Emergency Equipment and Procedures
  - C. Spill Cleanup Information
  - D. Notification Procedures
4. Protective measures
  - A. Personal Protective Equipment
  - B. Ventilation
  - C. Safety Equipment
5. Chemical Waste
  - A. Hazardous Waste Disposal
  - B. Disposal Policies and Procedures