

H A M P S H I R E C O L L E G E

CHEMICAL HAZARD
COMMUNICATION PROGRAM

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HAMPSHIRE COLLEGE CHEMICAL HAZARD COMMUNICATION PROGRAM

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I. OVERVIEW

A. Major Provisions of the OSHA Hazard Communication Standard

The Hazard Communication (HazCom) Standard of the Occupational Safety and Health Administration (OSHA) requires that the hazards of all chemicals are evaluated and that hazard information is provided to employers and employees.

As defined by the HazCom Standard the term "chemical" refers to any chemical element or compound, or, mixture of elements or compounds that may or may not be hazardous. Similarly, the term "hazardous chemical" refers to any chemical element or compound, or, mixture of elements or compounds determined to be hazardous. OSHA defines a hazardous chemical as one that exhibits physical or health hazards.

Physical Hazard - 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 (ignites spontaneously), unstable, or water reactive.

Health Hazard - a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles the acute or chronic health effects may occur ... include... carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins(liver), nephrotoxins (kidney), neurotoxins(nervous system), agents which act on the hematopoietic (blood) system, and agents which damage the lung, skin, eyes, or mucous membranes.

Determining the hazard of a chemical is the responsibility of the manufacturer or importer. Information on the hazards is found on the label and Material Safety Data Sheet (MSDS) prepared by the manufacturer or importer.

Labels must contain information about the identity and hazard of a chemical. MSDS provide more detailed information including: physical and chemical characteristics, health hazards including symptoms of overexposure and routes of exposure (e.g., inhalation), safe handling precautions, and emergency and first aid procedures. The manufacturer or importer provides MSDS to the employer when chemicals are purchased.

Employers who use hazardous chemicals in their operations are required to develop a hazard communication program to provide information concerning chemical hazards to their employees. That program must include a written description of how the employer complies with the requirements of the HazCom Standard, including: labeling, MSDS access, training, and maintaining a list of all hazardous chemicals used.

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B. Hampshire College Chemical Hazard Communication Program

This Hampshire College HazCom Program describes how the requirements of the OSHA HazCom Standard are met by the College and includes, as a separate document, a list of the hazardous chemicals present in the workplace. This Program and the Hazardous Chemical List are available to employees, or their designated representative, upon request. This program is maintained as an on-line document on the College intranet system. Paper copies are available upon request.

This HazCom Program does not apply to hazardous chemicals used in College laboratories. Laboratories must comply with the OSHA *Occupational Exposure to Hazardous Chemicals in Laboratories* Standard, 29 CFR 1910.1450, The Cole Science Center Safety Manual details College procedures to comply with the OSHA *Occupational Exposure to Hazardous Chemicals in Laboratories* Standard.

C. Exemptions

There are several HazCom Standard exemptions and labeling exemptions that are applicable to the College HazCom Program, which are summarized in Appendix A.

II. DESIGNATED RESPONSIBILITIES

The following designated responsibilities play key roles in carrying out the HazCom Program. Details of each function are described in subsequent sections.

A. HazCom Coordinator (Director of Environmental Health & Safety, ext. 6620)

The HazCom Coordinator coordinates the HazCom Program, including the following specific duties:

1. Maintain records of the hazardous chemicals present on campus and keep the Hazardous Chemical List (see Section VI) up-to-date.
2. Abstract from the College Hazardous Chemicals List separate lists of hazardous chemical present in each department and send these lists to each department.
3. Maintain the College master MSDS File.
4. Distribute MSDS to the appropriate departments.
5. Upon request by a department supervisor, or academic faculty or staff, specify the labels required on non-original containers (i.e., containers into which employees transfer hazardous chemicals) and process tanks (i.e., fixed equipment containing hazardous chemicals).

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6. Periodically inspect the workplace, including labeling, training and record keeping.
7. Coordinate periodic chemical surveys to ensure that MSDS are on file for all hazardous chemicals.
8. Maintain and update the Program as necessary.
9. Provide HazCom training for new employees and periodic updates for existing employees as described in Section VIII.
10. Contact the manufacturer upon notification by the HazCom Coordinator that a hazardous chemical container label does not meet the requirements of the HazCom Standard.

B. Department MSDS Monitors

Each department has a designated MSDS Monitor who is responsible for the following specific duties:

1. File and distribute, as necessary, MSDS and the department Hazardous Chemicals List received from the HazCom Coordinator.
2. Ensure that MSDS are readily available to employees in their work areas during their work shifts.
3. Make this HazCom Program, the department Hazardous Chemical List, and the OSHA HazCom Standard available for review to employees upon request.
4. Assist the HazCom Coordinator in scheduling training for department employees.

Department heads keep the HazCom Coordinator informed of who is serving as the Department MSDS Monitor.

C. Purchasing Staff

All employees authorized to make purchases on behalf of the College are collectively called the Purchasing Staff for the purposes of this HazCom Program. They are responsible, for their areas of responsibility, for contacts with the manufacturer or distributor of chemicals and for the following specific duties:

1. Request a MSDS for each chemical purchased for which a MSDS is not

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already available.

2. Upon receipt of MSDS send it to the HazCom Coordinator.
3. Monitor receipt of requested MSDS and follow up with the vendor if MSDS are not received.
4. Establish and enforce policies necessary to ensure that MSDS are received for all hazardous chemicals purchased by the administrative and non-laboratory academic departments for which they are responsible.

D. Supervisors and Academic Department Faculty and Staff

Supervisors and academic faculty and staff monitor compliance with the requirements of the HazCom Program within their work areas, including the following specific duties.

1. Conduct periodic chemical surveys as initiated by the HazCom Coordinator, to ensure that MSDS are available for all hazardous chemicals in their work areas.
2. Make sure MSDS are obtained for all products received that are otherwise not purchased through the Purchasing Staff (e.g., sample products).
3. Notify the HazCom Coordinator anytime they are aware of the presence of a chemical in their work area, including any being used on a trial basis, for which a MSDS is not available.
4. Affix labels as necessary to meet the employer's labeling responsibilities as described in Section VII. Labels are available from the HazCom Coordinator.
5. Notify the HazCom Coordinator anytime an improperly labeled manufacturer's container of hazardous chemical is found in a work area.
6. Properly label any hazardous chemical formulated under their supervision after consulting with the HazCom Coordinator regarding label content.
7. Forward all MSDS received to the appropriate Purchasing Staff or the HazCom Coordinator.

E. Human Resources

Human Resources provides the HazCom Coordinator a list of the names of all new and transferred employees and their position titles and Departments.

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III. MSDS PROCUREMENT

Manufacturers, importers and distributors are responsible for providing a MSDS with the initial shipment of any hazardous chemical sold and with the next shipment after a MSDS is updated. Hampshire College specifically states, as per 29 CFR 1910.1200 (g) (5), that the completeness and accuracy of the MSDS are the responsibility of the manufacturer or importer.

The Purchasing Staff requests MSDS at the time of the initial purchase and monitors to ensure that the MSDS are received. If the chemical is not hazardous or is an article as defined by the HazCom Standard, the vendor is asked to provide written confirmation of that determination. If a MSDS is not received with the initial order, the Purchasing Staff contacts the manufacturer or distributor to ensure that a MSDS is received.

Upon receipt of a MSDS the Purchasing Staff sends it to the HazCom Coordinator. Department supervisors and academic department faculty and staff who receive MSDS also forward the MSDS to the HazCom Coordinator.

IV. MSDS UPDATING PROCEDURE

Upon receipt of new or updated (revised) MSDS, the HazCom Coordinator updates the following College records:

1. The Hazardous Chemicals List.
2. The MSDS master file.
3. The department MSDS file and Hazardous Chemical List.

V. MSDS ACCESS PROCEDURE

Department MSDS files are available for review by the employee or their authorized representative in their work area. For employees with multiple work areas, MSDS files are kept at the location to which they regularly report.

If a MSDS for a hazardous chemical has not been supplied by the manufacturer, the employee requesting the MSDS is made aware of that fact and given any alternate safety information available based on the container label and references available from the HazCom Coordinator. The employee is not required to work with the hazardous chemical if s/he is not satisfied with the information provided until a MSDS is obtained for review by the employee.

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VI. HAZARDOUS CHEMICALS LIST

To maintain readily accessible records of the hazardous chemicals present on campus, a list of hazardous chemicals is maintained by the HazCom Coordinator.

The Hazardous Chemicals List is updated as new/revised MSDS are received. Given this updating frequency, the List, while an integral part of the HazCom Program, is maintained as a separate document. The Hazardous Chemical List for each department is sent by the HazCom Coordinator to each department's MSDS Monitor to be kept with each department's set of MSDS for access by employees and their representatives.

VII. CONTAINER LABELING

A. Manufacturer's Responsibility

The manufacturer or distributor of hazardous chemicals must label each container of hazardous chemical leaving their workplace with the following information:

1. Identity of the hazardous chemicals.
2. Appropriate warning for each physical and health hazard.
3. Name and address of the manufacturer, distributor or other responsible party.

B. Employer's responsibility

The employer must ensure that every container of hazardous chemicals in the workplace (container means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank or the like; pipes or piping systems are not considered containers) that contains a hazardous chemical is labeled with the following information:

1. Identity of the hazardous chemical (for a mixture the trade name can be used if it corresponds to the MSDS and to the Hazardous Chemicals List).
2. Appropriate hazard warnings for health and physical hazard.

Signs may be used instead of labels on stationary process containers.

Non-original (portable) containers, into which hazardous materials are transferred from labeled containers, do not require labels if (1) they are for the immediate use of the employee who transferred the material and, (2) the product will be completely used during the shift in which it is transferred. All other non-original containers must be labeled.

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C. Labeling Procedure

This procedure ensures that (1) containers entering the workplace, (2) any material formulated on-site, and (3) any materials in portable or other non-original containers, not used during the shift by the employee who made the transfer, are properly labeled.

1. Department supervisors and academic department faculty and staff must notify the HazCom Coordinator of any manufacturer's containers that have inadequate labels and receive instructions from the HazCom Coordinator as to the appropriate label.
2. Department supervisors and academic department faculty and staff who are responsible for on-site hazardous chemicals formulation must ensure that containers are properly labeled, consulting the HazCom Coordinator as necessary.
3. Department supervisors and faculty members inspect their work areas regularly to ensure that all containers of hazardous chemicals present are properly labeled. If unlabeled non-original (portable) containers of hazardous chemicals not in use are found, the supervisor identifies the employee responsible for the transfer of materials, reminds that employee of the labeling requirements, and supervises the placement of labels. If an improperly labeled container is found, the supervisor or faculty member is responsible for labeling.
4. The HazCom Coordinator periodically inspects the workplace, bringing labeling inadequacies to the attention of the supervisor or academic faculty or staff.

D. Hampshire College Labeling System

For non-original containers, any labeling method that meets the requirements for identifying contents and hazards may be used, which may include the National Fire Protection Association (NFPA) or Hazardous Materials Information System (HMIS) numerical ranking system. Employee training includes specific instruction on these labeling systems. Labels are available from the HazCom Coordinator.

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VIII. INFORMATION AND TRAINING

The HazCom Coordinator or other staff designated by the HazCom coordinator provide training for employees who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies, including new or transferred employees. On-line training customized to include specific College policies and requirements may also be used.

Training updates are provided periodically and when new hazards are introduced. The HazCom Coordinator maintains training records for all employees trained.

IX. PERFORMING NON-ROUTINE TASKS

Before employees are required to perform non-routine tasks, the department supervisor or academic faculty or staff responsible for the operation determines whether hazardous chemicals are involved and follows the procedure listed below:

1. The potential for exposure to hazardous chemicals is evaluated.
2. The appropriate MSDS are reviewed.
3. The precautions indicated on the MSDS are communicated to the employees involved.
4. Any required protective equipment or clothing is provided before the task is begun, as is instruction on its proper use.
5. If the supervisor or academic faculty or staff needs assistance to ensure the safety of employees or compliance with the HazCom Standard, the HazCom Coordinator is contacted.

X. OUTSIDE CONTRACTORS

When outside contractors perform work on campus the following conditions requiring an exchange of information may exist.

1. The contractor may bring hazardous chemicals to the work area, causing exposure of College faculty, staff and students.
2. The contractor's employees may be exposed to hazardous chemicals already in the workplace.

Both conditions are considered by the supervisor, or academic faculty or staff, responsible for bringing outside contractors into the workplace before any work begins so that appropriate MSDS are exchanged. If MSDS are provided to the contractor, a record of the MSDS provided is kept with the project file.

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OSHA HazCom Standard Exemptions

1. The requirements of the OSHA Hazard Communication Standard do not apply to the following.

- a. Hazardous waste as defined by 40 CFR 260.
- b. Tobacco and tobacco products.
- c. Wood or wood products (exemption does not include wood dust or treated woods).
- d. Articles that are manufactured items that have a function dependent upon their shape or design and which do not release or otherwise result in exposure to a hazardous chemical under normal conditions of use.
- e. Consumer products as defined by the Consumer Product Safety Act when the employer can show they are used in the workplace in the same manner as normal consumer use and that workplace use results in no greater exposure than experienced by consumers.
- f. Food for personal consumption by employees while in the workplace, or food or alcoholic beverages sold, used or prepared in a retail establishment.
- g. Any drug defined by the Federal Food, Drug and Cosmetic Act that is in a solid form for direct administration to patients (e.g., pills), packaged for sale to consumers (over-the-counter drugs), or drugs intended for personal consumption by employees.
- h. Cosmetics packaged for sale in retail, and cosmetics intended for personal use in the workplace.
- i. Ionizing and nonionizing radiation, and biological hazards.

2. The labeling requirements of the HazCom Standard do not apply to:

- a. Pesticides labeled according to the Federal Insecticide, Fungicide and Rodenticide Act.
- b. Chemicals subject to EPA labeling requirements under the Toxic Substances Control Act.
- c. Food, food additive, color additive, drug, cosmetic, medical or veterinary device labeled according to the Federal Food, Drug and Cosmetic Act.
- d. Alcoholic beverages intended for non-industrial use labeled according to the Federal Alcohol Administration Act.
- e. Consumer products labeled according to the Consumer Product Safety Act.
- f. Agricultural or vegetable seed treated with pesticides and labeled by the Federal Seed Act.

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The federal Occupational Safety and Health Administration (OSHA) Hazard Communication (HazCom) Standard requires that the College make employees aware of the hazards associated with chemicals used in the workplace. Manufacturers and distributors evaluate their products to determine the hazards and provide that information to the College when the chemical products purchased.

The Hampshire College HazCom Program. The College has developed a program to communicate chemical hazards to employees. A written HazCom program describes how this is done. The following summarizes the major elements of the HazCom Program. If you would like more information, ask your supervisor or contact the HazCom Coordinator. The Program does not apply to chemical use in the laboratory as their in an OSHA standard specifically for laboratory chemicals.

Container Labeling. Container labels are an important source of information about the hazards of a chemical. Manufacturers label all hazardous chemical containers with the identity of the chemical, and the physical and health hazards of the chemical. Manufacturer labels must not be removed or defaced. You should read the label on any new product before you use it.

When a chemical is transferred to another container, the new container must be labeled with the identity of the chemical and hazard warnings. The only exception to this requirement is if the employee transferring the material is to going to use it all during his/her work shift. If you transfer chemicals to new containers you are responsible for labeling the second container. For commonly transferred chemicals, such as cleaning products, pre-labeled containers are often used.

Two types of labels that are commonly used are National Fire Protection Association (NFPA) and Hazardous Materials Information System (HMIS) labels. These use a numerical hazard ranking system. Fire (red area), health (blue area), and reactivity (yellow area) hazards are ranked from 0, low hazard, to 4, high hazard.

Material Safety Data Sheets (MSDS). MSDS describe the chemical properties, physical and health hazards, required protective equipment, and handling and storage requirements of a hazardous chemical. The manufacturer or distributor of the chemical provides MSDS to the College. A central file of MSDS is kept by the Environmental Health and Safety Office. Copies are distributed to each department and are available for your review. When the label does not provide enough information you should look at the MSDS. If you are not sure where the MSDS are, ask your supervisor or the HazCom Coordinator.

MSDS for common office products can be found on the Environmental Health & Safety intranet site under "Chemicals in the Office".

HazCom Coordinator. The College's Director of Environmental Health & Safety coordinates the HazCom Program. The Coordinator helps departments and maintains centralized records. In addition each department which uses hazardous chemicals has a department MSDS monitor who maintains the department file and makes MSDS available to employees.

Information and Training. Each new employee who uses hazardous chemicals is provided training by the HazCom Coordinator.

Non-Routine Tasks. Before employees do non-routine tasks, supervisors evaluate the task, review MSDS and convey hazard information to employees.

Outside Contractors. If outside contractors bring hazardous chemicals onto campus, they must provide MSDS for those chemicals. Similarly, if a contractor's employee is exposed to hazardous chemicals used by the College, the College provides a MSDS when requested. The supervisor in charge of the contractor coordinates this exchange of information.

If you have questions about the HazCom Program, call Environmental Health & Safety at ext. 6620.

Chemical Hazards

Flammable or Combustible: a chemical that ignites easily and burns readily.

Corrosive: a chemical that can cause visible or irreversible tissue damage at the site of contact.

Reactive: A chemical that vigorously reacts to shock, pressure, temperature, air, or water or other environmental conditions.

Acute toxicity: An adverse effect on the body that happens shortly after exposure to a chemical such as a burn.

Chronic toxicity: An adverse effect on the body with symptoms that develop slowly such as cancer.

Route of Entry: How a chemical contacts the body, e.g., skin contact, skin absorption, ingestion, and inhalation.

Incompatible Chemicals: Chemicals that cause dangerous reactions when mixed together such as the release of energy or toxic gas.

Visión General. La Administración Federal en Seguridad Ocupacional y Salud (OSHA) Comunicación Peligrosos (HC) Standard requiere que cada empleado sea notificado de los peligros asociados con químicos en el lugar de trabajo. Los fabricantes y distribuidores evalúan sus productos para determinar los peligros y para proveer información al colegio cuando los productos químicos son comprados. El empleado entonces es responsable de informar a sus trabajadores el método apropiado para el manejo de dicho producto.

El programa de HazCom del colegio de Hampshire. El colegio ha desarrollado un programa para comunicar peligros químicos a los empleados. Un programa escrito de HazCom describe cómo se hace esto. Lo que sigue resume los elementos principales del programa de HazCom. Si quisieras más información, pregunta a su supervisor o entra en contacto con coordinador de HazCom. El programa no aplica al uso químico en el laboratorio como allí en un estándar del OSHA específicamente para los productos químicos del laboratorio.

Etiquetado del envase. Las etiquetas del envase son una fuente importante de la información sobre los peligros de un producto químico. Los fabricantes etiquetan todos los envases químicos peligrosos con la identidad del producto químico, y los peligros físico y para la salud del producto químico. Las etiquetas del fabricante no deben ser quitadas o ser desfiguradas. Debes leer la etiqueta en cualquier producto nuevo antes de que lo utilices.

Cuando un químico se transfiere a otro envase, se debe de anotar la misma información de la etiqueta, identificar al producto químico y las debidas precauciones. La única excepción sería si el empleado va a usar todo el producto químico durante su turno de trabajo. Si usted transfiere químicos a nuevos envases es su responsabilidad de rotular el segundo envase. Para químicos que son transferidos frecuentemente de envases, como los productos de limpieza, envases pre-marcados pueden ser usados a menudo.

Dos sistemas de etiquetas que se usan frecuentemente son las: Asociación Nacional de Protección contra el Fuego (NFPA) y el Sistema Informativo de Materiales Peligrosos (HMIS). Estos son sistemas numéricos clarificativos de peligro. El fuego [área color rojo], la salud [área color azul], y reactividad [área color amarillo] peligrosa están clasificados desde 0, como menos peligroso, hasta 4 que es el peligro mas alto.

Hojas Informativas de Material de Seguridad (MSDS). MSDS describe las propiedades químicas, peligros físicos y a la salud, se requiere equipo protector, y los requisitos para el manejo y almacenamiento de químicos peligrosos. Los fabricantes o distribuidores del producto provienen MSDS al colegio. Un archivo central de MSDS es guardado por la oficina ambiental de la salud y de seguridad. Las copias se distribuyen a cada departamento y están disponibles para el uso de todos. Cuando la etiqueta no contiene suficiente información sobre el producto, se debe de mirar en el MSDS. Si no esta seguro donde están los MSDS, pregunte a su supervisor o al coordinador de HazCom.

MSDS para los productos de oficina comunes se puede

encontrar en sitio del intranet Ambiental de la Salud y de Seguridad bajo, "Productos Químicos en la Oficina".

Coordinador de HazCom. El director del colegio de la salud y de la seguridad ambientales coordina el programa de HazCom. El Coordinador asiste departamentos y mantiene récords centralizados. Además cada departamento que utiliza los productos químicos peligrosos tiene un monitor del departamento MSDS que mantiene el archivo del departamento y hace que MSDS este a la disposición de los empleados.

Información y entrenamiento. Cada nuevo empleado que utiliza los productos químicos peligrosos es entrenamiento proporcionado del coordinador de HazCom.

Trabajos fuera de rutina. Antes de que el empleado comience un trabajo fuera de su rutina el supervisor evaluar primero el trabajo, revisar los apropiados MSDS e informar a cada empleado sobre precauciones.

Contratista visitante. Si contratistas traen de afuera químicos peligrosos dentro del Colegio, estos deben traer las MSDS para dichos químicos. Igualmente si el empleado del contratista se ve expuesto a químicos peligrosos utilizados por el Colegio, el Colegio tiene que proveer una MSDS cuando sea requerida. El supervisor a cargo del contratista coordina el intercambio de información.

Si tienes preguntas sobre el programa HazCom, llama a salud y seguridad ambientales en la extension 6620.

Químicos Peligrosos

Combustible o Inflamable: Químico que se enciende y quema fácilmente.

Corrosivo: Químico que puede causar visible ó irreversible daños del tejido fino en el sitio del contacto.

Reactivo: Químico que reacciona vigoroso al choque, presión temperatura, aire o agua otras condiciones ambientales.

Toxicidad aguda: Un efecto adverso en el cuerpo, los síntomas se convierten lentamente como el cáncer.

Toxicidad crónica: Un efecto adverso en el cuerpo, los síntomas se convierten lentamente como el cáncer.

Ruta de la entrada: Como un químico esta en contacto con el cuerpo, por ejemplo contacto en la piel, absorción de la piel, ingestión, inhalación.

Productos químico incompatibles: Químicos que causan reacciones peligrosas cuando mezclada juntas como el lanzamiento de energía o gas tóxico.