

LOYOLA UNIVERSITY CHICAGO

HAZARD COMMUNICATION  
PROGRAM



SEPTEMBER 2024

## TABLE OF CONTENTS

		<b>PAGE</b>
Section 1.0	Purpose	2
Section 2.0	Policy	2
Section 3.0	Responsibilities	2
3.1	Employer Responsibilities	
3.2	Employee Rights	
3.3	Employee Responsibilities	
Section 4.0	Definitions	4
Section 5.0	Training	7
5.1	New Employees	
5.2	Current Employees	
5.3	Required Training	
Section 6.0	Hazard Determination	9
6.1	Safety Data Sheets	
6.2	Container Labeling	
6.3	Notices	
Section 7.0	Outside Contractors	11
7.1	University's Responsibility	
7.2	Contractor's Responsibility	
REFERENCES		12

## **1.0 PURPOSE**

The purpose of this program is to put into practice the requirements of 29 CFR 1910.1200, also known as the United States Department of Labor's Occupational Safety and Health Administration (OSHA) Hazard Communication Program. All employees have both the need and right to know and understand the hazards and identities of the chemicals they are exposed to while performing their assigned duties. By providing information on the hazards of chemicals used in the workplace, injuries and illnesses potentially caused by those chemicals can be reduced. The program has three elements:

1. Maintaining files of all Safety Data Sheets (SDS).
2. Labeling all hazardous chemicals in the workplace.
3. Training all employees who are exposed to these chemicals.

The philosophy of this program is that safety is a shared responsibility. Faculty, staff, and students are expected to always maintain a high level of safety awareness and to take the appropriate actions to ensure their own safety and the safety of others.

## **2.0 POLICY**

Loyola University Chicago is committed to providing a safe and healthful environment for students, faculty, staff, visitors, and public. Every person at Loyola University Chicago has a role in maintaining a safe environment. This policy provides guidance for the safe handling of chemicals in the workplace.

This Hazard Communication Program has limited applications to laboratories and clinical labs, which are covered under the OSHA 1910.1450 Laboratory Standard ([1910.1450 - Occupational exposure to hazardous chemicals in laboratories. | Occupational Safety and Health Administration \(osha.gov\)](#)). Only the labeling and SDS requirements of this program apply to labs covered under that Standard. Academic labs and/or are required to have a Chemical Hygiene Plan or other prescribed safety plan in place.

## **3.0 RESPONSIBILITIES**

### **3.1 Employer Responsibilities**

1. Furnish employees a place of employment free from serious recognized hazards and comply with standards, rules and regulations issued under the OSH Act.
2. Develop and implement a written Hazard Communication Program that will satisfy the requirements of the OSHA Hazard Communication Standard (29 CFR 1910.1200).
3. Make the written hazard communication program available, upon request, to employees, their designated representatives, the Assistant Secretary, and the Director in accordance with the requirements of 1910.1020(e).
4. Enforce all provisions of this program and all other OSHA mandated programs in the workplace.

5. Train all current and future employees in the hazards of the chemicals to which they are or may be exposed to in their work areas and to familiarize them with the requirements of this program in a language and vocabulary that employees can understand.
6. Correct any workplace hazards cited by OSHA by the deadline set in the OSHA citation and submit the required abatement verification documentation.

### **3.2 Employee Rights**

OSHA has regulated rights and responsibilities for employees which include, but are not limited to, the following:

1. The right to notify OSHA, even anonymously, about workplace hazards.
2. The right to request an OSHA inspection if it is believed that there are unhealthy or unsafe conditions in the workplace. A Loyola representative or the employee that requested the inspection may participate in the inspection.
3. The right to file a complaint with OSHA within 30-days of retaliation or discrimination by an employer for making safety and/or health complaints or for exercising any employee's rights under the OSH Act.
4. The right to see OSHA citations issued to an employer. The employer must post the citations at or near the site of the alleged violations. Each citation must remain posted until the violation has been corrected, or for three working days, whichever is longer. Additionally, the employer must post abatement verification documents or tags as required.
5. The right to copies of personal medical records and records of exposure to toxic and/or harmful substances or conditions.

### **3.3 Employee Responsibilities**

1. Comply with all occupational safety and health standards issued by Loyola University Chicago including, but not limited to, the requirements of this program, which are or may be applicable to the employee's actions and conduct in the workplace.
2. Properly use all applicable safety and personal protective equipment (PPE) as required.

## 4.0 DEFINITIONS

**Assistant Secretary** means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.

**Bulk shipment** means any hazardous chemical transported where the mode of transportation comprises the immediate container (i.e., contained in tanker truck, rail car, or intermodal container).

**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.

**Combustible dust** means finely divided solid particulates of a substance or mixture that pose a flash-fire hazard or explosion hazard when dispersed in air or other oxidizing media.

**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, National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designee.

**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 in the course of employment to a hazardous chemical, and includes potential (e.g., accidental or possible) exposure. "Subjected" in terms of health hazards includes any route of entry (e.g., inhalation, ingestion, skin contact or absorption.)

**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.

**Gas** means a substance which (i) At 122 °F (50 °C) has a vapor pressure greater than 43.51 PSI (300 kPa) (absolute); or (ii) Is completely gaseous at 68 °F (20 °C) at a standard pressure of 14.69 PSI (101.3 kPa).

**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.

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

**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.

**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 outer package** means the first package enclosing the container of hazardous chemical.

**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.

**Liquid** means a substance or mixture which at 122 °F (50 °C) has a vapor pressure of not more than 43.51 PSI (300 kPa (3 bar)), which is not completely gaseous at 68 °F (20 °C) and at a standard pressure of 101.3 kPa, and which has a melting point or initial melting point of 68 °F (20 °C) or less at a standard pressure of 14.69 PSI (101.3 kPa). Either ASTM D4359–90 (R2019) (incorporated by reference, see § 1910.6); or the test for determining fluidity (penetrometer test) prescribed in section 2.3.4 of ADR 2019 (incorporated by reference, see § 1910.6) can establish whether a viscous substance or mixture is a liquid if a specific melting point cannot be determined.

**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, liquids, or solids); aerosols; oxidizer (gases, liquids, or solids); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; in contact with water emits flammable gas; or desensitized explosive. The criteria for determining whether a chemical is classified as a physical hazard are detailed in appendix B to § 1910.1200 - Physical Hazard Criteria (Mandatory).

**Physician or other licensed health care professional (PLHCP)** means an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows the individual to independently provide or be delegated the responsibility to provide some or all of the health care services referenced in § 1910.1200 paragraph (i).

**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.

**Produce** means to manufacture, process, formulate, blend, extract, generate, emit, or repackage.

**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.

**Released for shipment** means a chemical that has been packaged and labeled in the manner in which it will be distributed or sold.

**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 § 1910.1200 paragraph (g).

**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.

**Solid** means a substance or mixture which does not meet the definitions of liquid or gas.

**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, emit, extract, generate as a byproduct, 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. Workplace means an establishment, job site, or project, at one geographical location containing one or more work areas.

## 5.0 TRAINING

Supervisors will be responsible for the training of their employees within the respective departments as to the provisions of this Hazard Communication Program and in the safe handling of the chemicals within the various work areas. Training may be provided through an independent training provider with annual refresher information through PowerPoint, video, or any other such presentation which provides the employee with the opportunity to adequately understand the requirements of the Hazard Communication Program.

## 5.1 New Employees

All new employees whose job duties include working with hazardous chemicals will receive instruction on the requirements of this program prior to beginning their job assignment.

## 5.2 Current Employees

All current employees who work with hazardous chemicals and have not received training in this program or who are moving to another department where the employee's job duties will include working with hazardous materials will receive instruction on the requirements of this program within 60 days.

## 5.3 Required Training

The requirements of the Hazard Communication Program include, but are not limited to, the following information:

- (1) The purpose of the program and the responsibilities assigned under the program.
- (2) How to read and interpret Safety Data Sheets and where the SDSs are located within the respective departments.
- (3) The type of instruction the employee will receive from the department supervisor or designee and the employee's obligation to behave in a safe and responsible manner.
- (4) The employer's responsibility to provide a safe working environment and to enforce policies and work rules that have been established to support that environment.
- (5) An OSHA "competent person" is defined as "one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them" [[29 CFR 1926.32\(f\)](#)]

A competent person will provide instruction to employees in the safe handling and use of chemicals found within the workplace. This training will include, but is not limited to, the following information:

- (a) The proper selection, use and fit of any protective equipment or clothing required when handling any specific chemical, if applicable.
- (b) The potential effects of overexposure to or contact with certain chemical types and the general first-aid measures which should be followed. The SDS must always be referenced prior to working with any chemical.
- (b) General procedures to follow should a chemical be spilled or otherwise accidentally released to the environment. The SDS must always be referenced prior to initiating any cleanup or response activities.
- (d) General information regarding known hazardous combinations of chemicals with materials in the workplace.

- (6) Each laboratory shall define their own chemical plan and associated training pursuant to the Hazard Communication Standard.
- (7) Department supervisors are responsible for identifying non-routine tasks involving chemicals for which employees have not been trained. Special safety instructions will be given before the task is begun. The SDS must always be referenced prior to working with a chemical.
- (8) Training records and or certificates will be kept for employees receiving training under this program. The records will have the following information:
  - (a) The employee's name and department.
  - (b) The name of the person and/or company presenting the training material.
  - (c) The topics covered in the training (this may include an agenda, power point, training materials, etc.)
  - (d) The date on which the training was presented.
- (9) Training records should be kept by the Supervisor or their designee within the respective departments.

## **6.0 HAZARD DETERMINATION**

### **6.1 Safety Data Sheets**

Safety Data Sheets (SDS) will be obtained for all chemicals coming onto Loyola University Chicago campuses. This applies to all chemicals whether they are purchased from outside vendors or are donated to the University as samples or gifts. The responsibility for ascertaining that an SDS is on file within a department, laboratory, and/or work area lies with the supervisor or their designee of the specific area in which the chemical is to be used.

Hazard determinations for chemicals will be based on the information presented in the SDS provided by the suppliers of the chemicals. Updated SDS information provided by the suppliers of the chemicals should be placed within each department, laboratory, and/or work area.

SDSs within each respective department, laboratory, and/or work area should be reviewed at a minimum of an annual basis to ensure that they are up to date and contain accurate information.

It is the responsibility of the supervisor or their designee for the department to ensure that SDS's are provided for each hazardous chemical and are readily accessible during each work shift to employees when they are in their work area(s).

### **6.2 Container Labeling**

All containers of hazardous chemicals shall be labeled, and labels shall be prominently displayed on the container per the Hazard Communication Standard. The labeling system must meet the following minimum criteria:

1. The person in charge of receiving for the department or workplace shall insure that the supplier's label is not removed or defaced (intact and legible) when it first arrives.
2. For any chemicals which are determined to be hazardous, the following information must be supplied on the original label or on a label added at the time of receipt within the department or workplace:
  - a. Chemical name, accepted common name, list of constituents of a mixture, or trade name.
  - b. For trade names and mixtures, the intended use of the material must be listed along with the name of the person who formulated the mixture or the company which supplied the material.
  - c. Specific physical and health hazards involved with the symptoms of contact or overexposure to the chemical and appropriate first-aid measures.
  - d. A list of special precautions and protective equipment to be used when working with the chemical.
  - e. Whenever possible, the four-digit United Nations (UN) international hazardous material code number should be listed on the container. The four-digit number allows emergency service personnel to verify the health and safety hazards.
3. If any portion of a hazardous chemical is transferred from a labeled container to a different container, the new container must also be labeled with the same information unless the following conditions apply:
  - a. The new container is unlike any other in the workplace and;
  - b. The chemical will be used only by the person who transferred it to the new container and;
  - c. The chemical will be completely used up within the day or work period or any remaining chemical will be returned to a properly labeled container.
4. If any portion of the chemical will remain after use as a hazardous waste requiring special disposal procedures, the original container must be labeled to that effect with special labels provided by the responsible department. The container in which the chemical residue is collected must also be labeled with its contents and hazard class.

### **6.3 Notices**

Notices shall be posted in a common work area in each respective workplace which describes that department's container labeling system.

## **7.0 OUTSIDE CONTRACTORS**

### **7.1 University's Responsibility**

The contractor will be provided with SDSs for any chemicals used by Loyola University Chicago in the area where the contractor will be working.

### **7.2 Contractor's Responsibility**

Prior to the start of a project, a contractor shall provide their Loyola representative or their designee (ie: general contractor, consultant, etc.) with documentation that their employees have been trained on the use, handling, and storage of chemicals. Additionally, a contractor shall provide their Loyola representative with the company Hazard Communication program.

The contractor must provide their contact for Loyola University Chicago or their designee (ie: general contractor, consultant, etc.) with copies of SDSs for all chemicals that the employees of the contractor will be routinely working with while on the job site prior to start of a project. If a contractor uses additional chemicals other than those first presented to the University, the contractor shall provide SDS(s) prior to bringing a chemical on site.

## REFERENCES

United States Department of Labor OSHA Standard for General Industry:

[1910.1200 - Hazard Communication. | Occupational Safety and Health Administration \(osha.gov\)](https://www.osha.gov/1910.1200)

Hazard Communication Program standard 29 CFR 1910.1200

1910.1200 - Appendix A Health Hazard Criteria (Mandatory)

1910.1200 - Appendix B Physical Hazard Criteria (Mandatory)

1910.1200 - Appendix C Allocation of Label Elements (Mandatory)

1910.1200 – Appendix D Safety Data Sheets (Mandatory)

1910.1200 – Appendix E Definition of a “Trade Secret” (Mandatory)

1910.1200 – Appendix F Guidance for Hazard Classifications Re: Carcinogenicity  
(Non-Mandatory)

## ADDITIONAL INFORMATION

Loyola University Chicago Hazard Communication Standard – Interpretation of Safety Data Sheets

OSHA Brief – Hazard Communication Standard: Labels and Pictograms

<https://www.osha.gov/sites/default/files/publications/OSHA3636.pdf>

OSHA Fact Sheet: Final Rule Modifying the Hazard Communication System (HSC) to Maintain Alignment with the Global Harmonized System of Classification and Labeling of Chemicals (GHS)

<https://www.osha.gov/sites/default/files/publications/OSHA4437.pdf>