



# Hazard Communication Program (Employee Right-To-Know)

Revision: March 2022

---

|                     |  |           |
|---------------------|--|-----------|
| <b>1.0</b>          | <b>INTRODUCTION</b>  | <b>2</b>  |
| <b>2.0</b>          | <b>OBJECTIVE</b>   | <b>2</b>  |
| <b>3.0</b>          | <b>SCOPE</b>   | <b>2</b>  |
| 4.1                 | ASSOCIATE VICE CHANCELLOR FACILITIES PLANNING & MANAGEMENT | 3         |
| 4.2                 | UNIVERSITY SAFETY & ASSURANCES                             | 3         |
| 4.3                 | DEPARTMENT HEADS   | 3         |
| 4.4                 | SUPERVISOR/MANAGER   | 4         |
| 4.5                 | ALL EMPLOYEES  | 4         |
| <b>5.0</b>          | <b>HAZARD IDENTIFICATION</b>                               | <b>5</b>  |
|                     | <i>Highly Hazardous Chemicals</i>                          | 6         |
| 5.1                 | CHEMICAL INVENTORY   | 6         |
| 5.2                 | SAFETY DATA SHEETS (SDS)                                   | 6         |
|                     | <i>SDS Format</i>  | 6         |
|                     | <i>Obtaining an SDS</i>                                    | 7         |
|                     | <i>Review of SDS</i>                                       | 7         |
|                     | <i>SDS Maintenance</i>                                     | 7         |
|                     | <i>Containers in the workplace</i>                         | 8         |
|                     | <i>Portable and Secondary Containers</i>                   | 8         |
| 5.4                 | POSTINGS   | 8         |
| <b>6.0</b>          | <b>EMPLOYEE TRAINING AND EDUCATION</b>                     | <b>9</b>  |
| 6.1                 | PROGRAM OUTLINE  | 9         |
| <b>7.0</b>          | <b>CONTRACTORS &amp; VISITORS</b>                          | <b>10</b> |
| 7.1                 | OUTSIDE CONTRACTORS NOTIFICATION                           | 10        |
| 7.2                 | VISITORS   | 10        |
| <b>8.0</b>          | <b>PROGRAM AVAILABILITY</b>                                | <b>10</b> |
| <b>9.0</b>          | <b>REVISION RECORD</b>                                     | <b>10</b> |
| <b>APPENDIX A-1</b> | <b>DEFINITIONS</b>   | <b>11</b> |
| <b>APPENDIX A-2</b> | <b>HAZARD IDENTIFICATION SYSTEMS</b>                       | <b>14</b> |
| <b>APPENDIX A-3</b> | <b>COVERED DEPARTMENTS/FUNCTIONAL AREAS</b>                | <b>17</b> |

# Hazard Communication Program

## 1.0 INTRODUCTION

The management of the University of Wisconsin - Milwaukee (UWM) 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: Online - <http://www4.uwm.edu/usa/safety/chem/chemrtk.cfm#written> and by request from University Safety & Assurances - (414) 229-6339.

## 2.0 OBJECTIVE

The objective of this program is to communicate to all UWM covered employees the hazards of the chemicals they work with and the necessary steps to prevent occupational injuries and illnesses related to chemical exposure.

## 3.0 SCOPE

This written program applies to all UWM employees and/or departments, not covered and managed under the UWM Chemical Hygiene program, where hazardous chemicals are known to be present both under normal conditions and in a foreseeable emergency.

See Appendix A-3 for list of departments/functional areas covered under the program.

The Hazard Communication Program has four major components:

- Container labeling and other forms of warning
- Safety Data Sheets (SDSs)
- Employee education and training; and
- Written program and chemical inventory

## **4.0 PROGRAM RESPONSIBILITIES**

### **4.1 Associate Vice Chancellor Facilities Planning & Management**

- Ensure all management personnel are aware of and in compliance with this standard and the Hazard Communication Program.
- Support programs to enable and ensure compliance with the provisions of 29 CFR 1910.1200 (Hazard Communication Standard) and with all applicable state statutes and UWM policies.

### **4.2 University Safety & Assurances**

- Provide Hazard Communication training for new UWM employees and maintain training records.
- Provide technical assistance/guidance to administrators, directors, managers, and/or supervisors in developing and implementing Hazard Communication procedures and practices.
- Monitor legal requirements for changes with respect to the Hazard Communication Program and regulated substances.
- Assist directors, managers, supervisors, and/or employees in developing and implementing procedures for the use of protective equipment to protect employee health.
- Facilitate Chemical Safety Committee and Highly Hazardous Chemical Review & Purchasing process to manage hazardous materials and screen before introduction to campus for use.
- If needed, provide chemical and exposure information to Human Resources and/or a licensed physician necessary for medical consultations and examinations.
- Conduct annual audits, as necessary, to determine the effectiveness of the Hazard Communication Program and compliance with OSHA standards and UWM requirements.
- Review and update the site program at least annually.
- Provide technical assistance to assure proper disposal of chemicals in the facility.
- Coordinate on site emergency procedures and fire department activities related to hazardous chemicals.
- Maintain guidance materials for program on US&A section of the UWM web site.

### **4.3 Department Heads**

- Ensure supervisors are carrying out prescribed safety procedures.
- Ensure up-to-date records are maintained on training of all employees required to handle hazardous chemicals.
- Maintain Standard Operating Procedures (SOPs) for chemical safety when hazardous chemicals are used in the department.
- Contact University Safety & Assurances when initial plans are made to add/change the following systems (to ensure compliance OSHA, and EPA, and other regulatory requirements): ventilation, drains and piping, fire alarms, egress changes, safety equipment, chemical storage/use patterns.

#### **4.4 Supervisor/Manager**

The individual department manager or supervisor is directly responsible for all health and safety conditions within each department. Ultimately, the responsibility for the Hazard Communication compliance rests with those individuals who supervise or manage employees handling hazardous chemicals (i.e., first-line supervisors). The supervisor shall enforce applicable safety and health rules:

- Identify the hazardous chemicals in the work area and maintain current chemical inventory
- Maintain Safety Data Sheets for each chemical on inventory
- Where required, develop SOPs, which address safe handling of hazardous chemicals in the department. (This includes updating SOPs as new chemical hazards are identified.)
- Assure initial Hazard Communication training is provided to new employees, and refresher (when new chemicals are introduced to the work area) training is provided to affected employees as needed.
- Provide training of employees in safe handling of hazardous chemicals using established SOPs and when SOPs are updated to reflect new hazards.
- Make sure that each employee is provided with, or has available, the necessary personal protective equipment and is instructed on work procedures to ensure safe practices and activities.
- See that each worker is using the appropriate protective devices before attempting any procedure in which there is a possibility of personal injury.
- If in doubt as to what protective devices to use, either consult the appropriate SDS or University Safety & Assurances.
- Make routine surveys of the work area to ensure proper labeling, clarity of labels and chemical handling
- Comply with chemical review procedure prior to introduction of new products/chemicals.
- Investigate the cause of any injury accident and file documentation in accordance with the site Accident Investigation Program.

#### **4.5 All Employees**

- Follow established SOPs or site procedures when performing any work with hazardous chemicals.
- Know where the Hazard Communication Program, SDSs, and chemical inventory are kept in the department/facility.
- Understand basic information provided on SDSs.
- Know your role in emergency procedures.
- Know the emergency evacuation routes from the department/facility.
- Use engineering controls and personal protective equipment as required by SOPs and the PPE Program.
- When in doubt as to the safe and proper way to use equipment, or perform an operation, consult your supervisor.
- Store chemicals and solvents in properly designated areas segregated from incompatible chemicals or materials.

- Assure all chemical containers are labeled and do not remove or deface labels on the containers.
- Immediately inform your supervisor/manager of:
  - Any symptoms of overexposure possibly related to hazardous chemicals;
  - Any work-related injuries or accidents;
  - Missing labels on containers that you cannot correct;
  - Malfunctioning engineering controls or safety equipment.
  - Contact your Supervisor, your Human Resource Representative prior to, or immediately following a medical consultation or examination related to workplace chemical exposure.
  - Attend all Hazard Communication classroom training or complete all online Hazard Communication training.

## 5.0 HAZARD IDENTIFICATION

The quality of the Hazard Communication Program depends on the adequacy and accuracy of the hazard determination. Chemical manufacturers, importers, and distributors have the primary responsibility for hazard determination, and are required to review available scientific evidence concerning the hazards of the chemicals they produce, import or distribute.

A chemical presents a health hazard if it is a toxic, poison, radioactive, irritant, carcinogen or has other known health effects. A chemical may present a physical hazard if it is combustible, flammable, explosive, pyrophoric, water reactive, or unstable. Compressed gases, oxidizers, and organic peroxides also present physical hazards.

To be considered a health hazard, a chemical need not necessarily present a significant risk of health impairment at levels of exposure foreseeable in the workplace. The Hazard Communication Standard considers a chemical to potentially present hazardous health effects if 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.

For any chemical, which is purchased from any outside supplier, the manufacturer's or supplier's Safety Data Sheet (SDS) and label will be the principal source of hazard information.

UWM relies upon the hazard determination and the Safety Data Sheet (SDS) supplied by the chemical manufacturer or distributor to determine the hazards of all the chemicals bought, used or stored in campus operations.

The chemicals found in the following listings of chemical substances will automatically be treated as hazardous:

- Occupational Safety and Health Administration (OSHA), 29 CFR Part 1910, Subpart Z, Toxic and Hazardous Substances.
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment (latest edition).

The following sources shall be considered in determining if a chemical is a carcinogen or potential carcinogen:

- National Toxicology Program (NTP), Annual Report on Carcinogens (latest edition).
- International Agency for Research on Cancer (IARC) Monographs (latest edition).

### ***Highly Hazardous Chemicals***

The Highly Hazardous Chemical Review Process administered by the UWM Chemical Safety Committee ensures that employees working with potential or known carcinogenic and/or reproductive hazards or other high hazard chemicals are kept safe. Highly hazardous chemical purchase requests are screened and approved/rejected by the committee to assure the proper storage, handling, emergency, SOPs and training plans are in place prior to use by employees.

[UWM Chemical Safety Committee page link](#)

## **5.1 Chemical Inventory**

Each department will maintain a master chemical inventory list and have a SDS on file for each chemical listed. Each list entry must identify the manufacturer and contain the product name listed on both the container label and SDS. The updated list will be kept in the front of the first volume of each set of SDSs. Employees in each department should be familiar with the location and use of the chemical inventory. Employees who have questions about the chemical inventory list should contact their immediate supervisor.

Physical inventory of all chemicals in the facility must be reviewed and updated on an annual basis by each department. If a chemical listed on the inventory does not have a corresponding SDS on file, it must be sought out from suppliers. If the SDS is not obtained, the chemical in question should be removed from use and disposed of per UWM waste procedures.

## **5.2 Safety Data Sheets (SDS)**

### ***SDS Format***

Safety Data Sheets are written or printed material concerning product hazard determination, which are prepared and distributed with chemicals by chemical manufacturers and distributors. SDSs are written in English and contain the following information:

- Identity of the chemical as provided on the container label;
- Physical and chemical characteristics of the material;
- Physical hazards of the material;
- Health hazards of the material;
- Primary route(s) of entry;

- Exposure limits, Threshold Limit Value (TLV), OSHA Permissible Exposure Limit (PEL), or Supplier recommended limits;
- Whether the material or components have been found to be a potential carcinogen by the International Agency for Research on Cancer (IARC), National Toxicology Program (NTP), or by OSHA;
- Applicable precautions for safe handling and use;
- Applicable control measures;
- Emergency and first-aid procedures;
- Date of preparation or date of last change;
- Name, address and telephone number of the chemical manufacturer, importer, employer or other responsible party, who can provide additional information.

### ***Obtaining an SDS***

The department manager and/or supervisor or their designee is responsible for obtaining updated (within 3 years of current date) SDS for the company. A SDS should be available for every hazardous chemical listed on the inventory list. In the event an SDS is not available, a search for the information will be made (internet search, e-mail request, etc.).

### ***Review of SDS***

The department manager and/or supervisor is responsible for reviewing all incoming data sheets for new and significant health/safety information. Appropriate measures can then be taken to inform affected employees.

If deficiencies exist or additional information is needed concerning SDSs, the chemical manufacturer or supplier will be contacted to obtain necessary information.

### ***SDS Maintenance***

The department or division designee is responsible for maintaining the SDS.

If SDS are not available or new chemicals in use do not have SDS, employees should contact their supervisor.

*Note: SDSs will be maintained in accordance with 29 CFR 1910.1020 – Subpart C – General Safety and Health Provisions – “Access to Employee Exposure and Medical Records.” Paragraph (d) Preservation of Records; (1) (11)(A)&(B), Material Safety Data Sheets; and paragraph (c)(5)(iv). Records Concerning the Identity of a Substance or Agent need not be retained for any specific period, as long as some record of the identity (chemical name if known) of the substance or agent, where it is used, and when it was used are retained for at least thirty (30) years.*

## 5.3 Precautionary Labeling

### *Containers in the workplace*

Labels are designed to provide information to employees concerning the hazards of various chemicals. Therefore, it is important that hazardous chemicals remain in properly labeled containers. The Hazard Communication Standard requires that workplace containers with hazardous products be labeled legibly, in English, with the contents and appropriate hazard warnings prominently displayed as part of the label. As a minimum, each label must contain the following:

- Identification of the material in the container (chemical name and constituents).
- Appropriate physical and health hazard warnings including target organ effects.
- Name and address of chemical manufacturer, importer, or the responsible party (applies only to manufacturers' labels. Secondary containers must contain the product and/or chemical name and primary hazards).

All labels on incoming chemicals must not be defaced in any way. Observation or other detection of defaced labels must be immediately reported to supervision so that appropriate labels can be applied.

Labels may be replaced if damaged, worn or accidentally removed. Any container with a missing or defaced label will be removed by the supervisor or operator and not returned until the condition has been rectified.

### *Portable and Secondary Containers*

All portable and secondary containers of hazardous chemicals require labeling. The exception to this policy: portable containers of hazardous chemicals do not have to be labeled if they contain chemicals transferred from a labeled container, and are intended only for the immediate use by and remain in the constant control of the employee who performs the transfer. All other containers and usage will require labeling. The employee who uses the portable or secondary container is responsible for placing the label on the container.

At minimum, the label must contain the product name that matches the original manufacture's label, and the primary hazard (i.e. flammable, corrosive, toxic, etc.).

Employees who have questions about the precautionary labeling system should contact their supervisor.

## 5.4 Postings

The entrances to all work areas where hazardous chemicals are present are to be posted with appropriate warnings signs or placards.



## **6.0 EMPLOYEE TRAINING AND EDUCATION**

UWM employees covered by the Hazard Communication Standard will receive Hazard Communication awareness training and information at the time of hire and refresher training as required thereafter. In addition, employees will also receive department-specific hazard training initially, upon transfer to different job function, and as hazards change in their work area. The training curriculum will vary depending upon actual job functions and or assignments.

### **6.1 Program Outline**

Employee hazard communication awareness will include initial training for new employees and continuing education for all covered employees. The continuing education will be conducted prior to introducing a new chemical hazard into a department, when an employee is re-assigned to another affected department and during the annual refresher training.

The initial training curriculum will include at least the following:

- An orientation to the UWM Hazard Communication Program
- Definition of the legal and UWM requirements
- How to recognize a hazard or detect the presence or release of a chemical
- Overview of chemicals present in the employee's work areas and the associated hazards
- Access to and how to read an SDS
- Labeling requirements
- Procedures to follow in the event of exposure to chemicals

The department Manager or Supervisor is responsible for providing employees with department-specific initial, job transfer and hazard change training.

Department specific hazard communication training curriculum will include the following:

- Chemicals used within the department and their associated hazards
- Personal protective equipment available and its use in protecting against specific hazards
- Emergency first aid procedures and equipment (eye wash and shower facilities) use and locations
- Labeling requirements and responsibilities

Initial training will be documented and maintained by US&A. All training documentation will be maintained for a minimum of 30 years.

Effective employee training and education is the most critical component of the hazard communication program. A properly conducted training program will insure those employees are aware of hazards in the workplace and appropriate control measures to protect themselves.

## 7.0 CONTRACTORS & VISITORS

### 7.1 Outside Contractors Notification

The UWM contact/hiring personnel and/or area supervisor **shall review** any specific hazards in the work area(s) with the contractor's job supervisor and provide any requested SDSs. The contractor job supervisor is **required** to provide both the UWM contact and US&A with their SDSs for **any** hazardous materials they may bring on site or use on site during their job assignment. If the contractor introduces a new hazard, affected employees will be trained by their supervisor.

### 7.2 Visitors

Visitors to areas where hazardous chemicals are used or stored shall be advised by the escorting Supervisor or UWM employee of the health and physical hazards and the necessary precautions in the work area.

## 8.0 PROGRAM AVAILABILITY

Copies of this written program will be made available during training or upon request. Employees who wish to review the Hazard Communication Program are encouraged visit the [UWM US&A web page](#) or contact their supervisor.

Questions regarding the contents of this program should be directed to the department supervisor or the E&S Engineer.

## 9.0 REVISION RECORD

| <b>Date</b> | <b>Revision</b> | <b>Reviewed By</b> | <b>Description of Revision</b>        |
|-------------|-----------------|--------------------|---------------------------------------|
| 11/15/17    | Rev. 1          | J. Reick           | Major revision/recreation of document |
| 3/8/2022    | Rev. 2          | G. Winters         | Minor edits                           |

## APPENDIX A-1     **Definitions**

**Affected employee:** Any employee who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers who encounter hazardous chemicals only in non-routine isolated instances are not covered.

**Chemical:** Any element, chemical compound or mixture of elements and/or compounds.

**Chemical manufacturer:** An employer with a workplace where chemical(s) are produced for use or distribution.

**Chemical name:** 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 Abstract Service, (CAS), rules of nomenclature, or a name which will clearly identify the chemical for the purpose of conducting a hazard evaluation.

**Combustible liquid:** Any liquid having a flashpoint at or above 100° F but below 200° F except any mixture having components with flashpoints of 200° F or higher, the total volume of which make up 99% or more of the total volume of the mixture.

**Compressed gas:** A gas or mixture of gases having, in a container, an absolute pressure exceeding 40 psi at 70° F.

**Container:** Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical.

**Distributor:** A business other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.

**Employee:** A worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies.

**Employer:** 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:** Any employee or contractor who is subjected to a hazardous chemical in the course of employment through any route of entry; inhalation, ingestion, skin contact, animal bites, injection, or absorption.

**Flashpoint:** The minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite.

**Flammable:** A chemical that falls into one of the following categories:

- **Aerosol, flammable:** When tested by the method described in 10 CFR 1500.45 yields a flame projection exceeding 10 inches at full valve opening, or a flashback at any degree of valve opening.
- **Gas, flammable:** A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of 13% by volume or less.
- **Liquid, flammable:** Any liquid having a flashpoint below 100° F.
- **Solid, flammable:** A solid other than a blasting agent or explosive that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard.

**Foreseeable emergency:** 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.

**Hazardous chemical:** Any chemical which is a physical hazard or a health hazard.

**Hazard warning:** Any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the hazards of the chemical(s) in the container(s).

**Health hazard:** 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.

**Highly Hazardous Chemical:** Carcinogens, toxic or highly toxic agents, reproductive toxins, or any chemical the UWM Chemical Safety Committee has identified as requiring additional review.

**Identity:** Any chemical or common name which is indicated on the SDS for the chemical. The identity used shall permit cross-references to be made among the required list of hazardous chemicals, the label and the SDS.

**Immediate use:** 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:** 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:** Any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals

**Physical hazard:** When there is scientifically valid evidence the chemical is flammable, a combustible liquid, a compressed gas, an explosive, an organic peroxide, an oxidizer, a pyrophoric, an unstable reactive or water reactive.

**Portable or Secondary Container:** Container filled from original manufacturers packaging (examples: spray bottle, jerry can, bucket, oil can)

**Safety Data Sheets (SDS):** Written or printed material concerning a hazardous chemical.

**Specific chemical identity:** The chemical name, Chemical Abstract Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

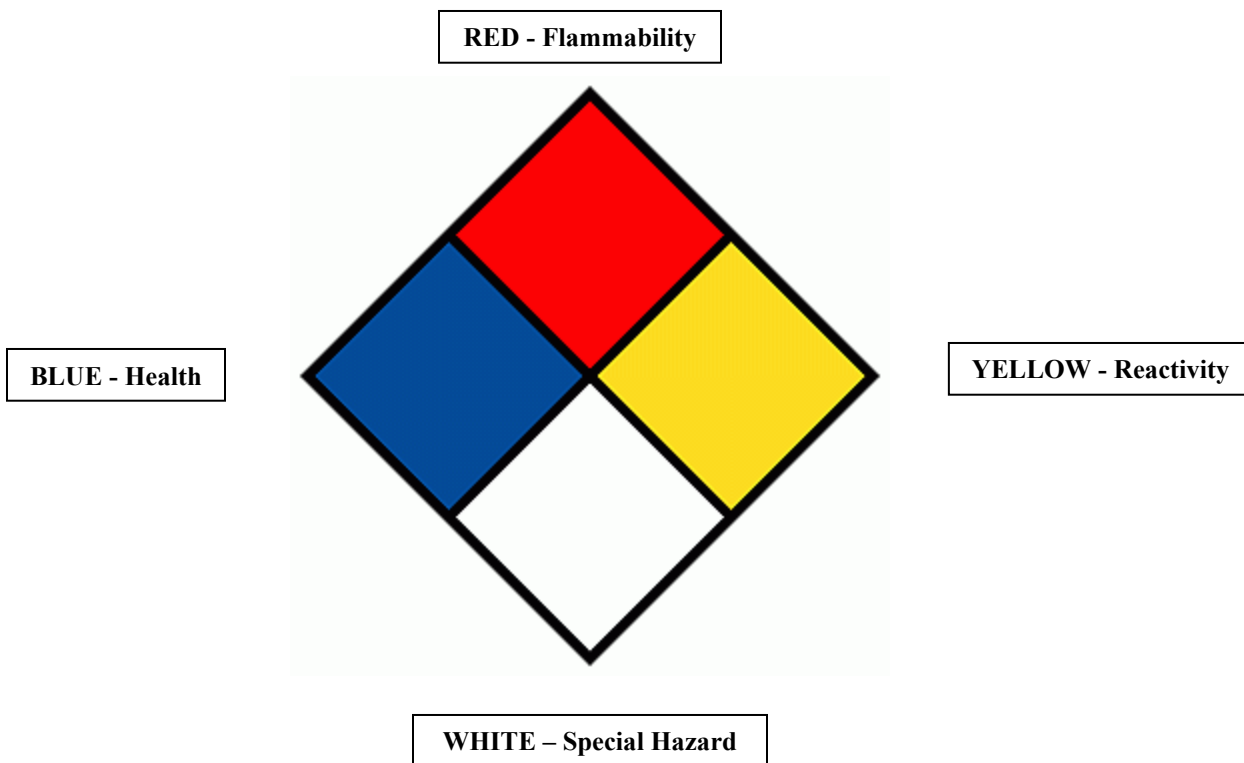
**Trade secret:** Any confidential formula, pattern, process, device, information, or compilation of information (including chemical name or other unique chemical identifier) that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.

**Work area:** A room or defined space in a workplace where hazardous chemicals are produced or used and where employees are present.

**Workplace:** An establishment at one geographical location containing one or more work areas.

## Appendix A-2 Hazard Identification Systems

The NFPA diamond hazard identification system may be used on containers to convey hazards. This system rates the flammability, health and reactivity hazards of a material from 0-4, with 4 being the highest. Described below is a summary of the ratings.



### Flammability hazard rating - RED Diamond

|                   |   |
|-------------------|---|
| 0 Minimal Hazard  | Materials that are normally stable and will not burn unless heated  |
| 1 Slight Hazard   | Materials that must be preheated before ignition will occur. Flammable liquids in this category will have flash points (the lowest temperature at which ignition will occur) at or above 220 F.                         |
| 2 Moderate Hazard | Materials that must be moderately heated before ignition will occur. Including flammable liquids with flash points at or above 100 F and below 200 F.   |
| 3 Serious Hazard  | Materials capable of ignition under normal temperature conditions, including flammable liquids with flash points below 73 F and boiling points above 100 F as well as liquids with flash points between 73 F and 100 F. |
| 4 Severe Hazard   | Very flammable gases or very volatile flammable liquids with flash points below 73 F and boiling points below 100 F.  |

### **Health Hazard Ratings – Blue Diamond**

|                   |  |
|-------------------|--|
| 0 Minimal Hazard  | Materials that, on short exposure, are unlikely to cause injury.   |
| 1 Slight Hazard   | Materials that, on short exposure, could cause irritation, but only minor residual injury.   |
| 2 Moderate Hazard | Materials that, on intense or short exposure, could cause temporary incapacitation or possible residual injury. This material would be considered by OSHA as toxic for skin and oral exposure.     |
| 3 Serious Hazard  | Materials that, on short exposure, could cause serious or temporary injury. This material would be considered by OSHA as highly toxic by oral exposure, and toxic by skin and inhalation exposure. |
| 4 Severe Hazard   | Materials that, on very short exposure, could cause death or major residual injury. This material would be considered as highly toxic by OSHA for all routes of exposure.                          |

(See Attachment 2 for the relationship of how an OSHA toxic and highly toxic fit into the NFPA rating system)










### **Reactivity Hazard Rating – Yellow Diamond**

|                   |  |
|-------------------|--|
| 0 Minimal Hazard  | Materials that are normally stable, even under fire conditions, and will not react with water.   |
| 1 Slight Hazard   | Materials that are normally stable but can become unstable at high temperatures and pressures. These materials may react with water but they will not release energy violently.                                      |
| 2 Moderate Hazard | Materials that in themselves are not normally unstable and will readily undergo violent chemical change but will not detonate. These materials may also react with water.  |
| 3 Serious Hazard  | Materials that are readily capable of detonation or explosive reaction but require a strong initiating source or must be heated under confinement before initiation; or materials that react explosively with water. |
| 4 Severe Hazard   | Materials that are readily capable of detonation or explosive decomposition at normal temperatures and pressures.  |

The **White Diamond** is reserved for special hazards and may contain graphics to convey hazards such as explosive, water reactive, corrosive, etc. Graphics or text may be used.

## GHS Pictograms and Hazards

Globally Harmonized pictograms used to denote hazards or chemical labels:

|   |   |  |
|---|---|--|
|  <ul style="list-style-type: none"> <li>▪ Carcinogen</li> <li>▪ Mutagenicity</li> <li>▪ Reproductive Toxicity</li> <li>▪ Respiratory Sensitizer</li> <li>▪ Target Organ Toxicity</li> <li>▪ Aspiration Toxicity</li> </ul> |  <ul style="list-style-type: none"> <li>▪ Flammables</li> <li>▪ Pyrophorics</li> <li>▪ Self-Heating</li> <li>▪ Emits Flammable Gas</li> <li>▪ Self-Reactives</li> <li>▪ Organic Peroxides</li> </ul> |  <ul style="list-style-type: none"> <li>▪ Irritant (skin and eye)</li> <li>▪ Skin Sensitizer</li> <li>▪ Acute Toxicity</li> <li>▪ Narcotic Effects</li> <li>▪ Respiratory Tract Irritant</li> <li>▪ Hazardous to Ozone Layer (Non-Mandatory)</li> </ul> |
| <p style="text-align: center;"><b>Gas Cylinder</b></p>  <ul style="list-style-type: none"> <li>▪ Gases Under Pressure</li> </ul>  | <p style="text-align: center;"><b>Corrosion</b></p>  <ul style="list-style-type: none"> <li>▪ Skin Corrosion/Burns</li> <li>▪ Eye Damage</li> <li>▪ Corrosive to Metals</li> </ul>                  | <p style="text-align: center;"><b>Exploding Bomb</b></p>  <ul style="list-style-type: none"> <li>▪ Explosives</li> <li>▪ Self-Reactives</li> <li>▪ Organic Peroxides</li> </ul>  |
| <p style="text-align: center;"><b>Flame Over Circle</b></p>  <ul style="list-style-type: none"> <li>▪ Oxidizers</li> </ul>   | <p style="text-align: center;"><b>Environment<br/>(Non-Mandatory)</b></p>  <ul style="list-style-type: none"> <li>▪ Aquatic Toxicity</li> </ul>  | <p style="text-align: center;"><b>Skull and Crossbones</b></p>  <ul style="list-style-type: none"> <li>▪ Acute Toxicity (Fatal or Toxic)</li> </ul>   |



## **Appendix A-3          Covered Departments/Functional Areas**

The following list identifies departments/functional areas covered under the program.  
*See section 3.0 Scope for full description as this list may not be all-inclusive.*

### **Finance and Administrative Affairs:**

#### *University Safety & Assurances*

Animal Resource Center: Research Animal Veterinarian

Biological Safety Program: Biological Safety Officer

Occupational Safety: Safety & Emergency Preparedness Manager

Radiation Safety Program: Radiation Safety Officer

Hazardous Waste: Hazardous Waste Operator

#### *Facility Services*

Environmental Services Supervisor

Shops: Lead Workers

Grounds: Grounds Supervisor

Heat Plant: Heat Plant Superintendent

Stores: Advanced Inventory Control Coordinator

### **Academic Affairs**

#### *Architecture and Urban Planning*

Work Shop: Instructional Program Manager

College of Health Sciences

Clinical Lab Sciences: Lab Manager

#### *Engineering and Applied Sciences*

Supervisor, instructor or program coordinator

#### *Graduate School*

Supervisor, instructor or program coordinator

#### *Great Lakes WATER Institute, School of Freshwater Sciences*

Supervisor, instructor or program coordinator

#### *Letters and Science*

Supervisor, instructor or program coordinator

Chemistry: SDS collection in Room 380

#### *Library*

Facilities: Facilities Manager

#### *Peck School of the Arts*

Supervisor, instructor or program coordinator

**Student Affairs**

*Children's Center*

Facilities: Director

*Klotsche Center*

Health Science: Lab Supervisor/Instructor

Recreational Sports: Assistant Director of Rec. Sports

Athletics: Director of Sports Medicine

*Norris Health Center*

Laboratory: Laboratory Supervisor

*University Housing:*

Custodial Operations: Facilities and Operations Manager

Grounds and Maintenance: Building and Grounds Supervisor

*University Union*

Custodial: Custodial Supervisor

Maintenance: Maintenance Supervisor