



## **Hazard Communication Program**

Last Review: June 2023  
Last Revision: June 2023

# TABLE OF CONTENTS

INTRODUCTION .....	3
Foreword .....	3
Objective .....	3
Applicability .....	3
Responsibilities .....	4
Program Enforcement .....	5
LABELING HAZARDOUS CHEMICALS.....	6
Content Requirement .....	6
Generating Labels .....	7
INVENTORIES AND SAFETY DATA SHEET REQUIREMENTS.....	8
Inventories.....	8
Safety Data Sheets .....	8
TRAINING .....	11
Routine Tasks.....	11
Non-Routine Tasks and Unlabeled Pipes .....	12
General Chemical Safety .....	12
CONTRACTORS .....	13
EMERGENCY PROCEDURES.....	14
APPENDIX A - DEFINITIONS OF TERMS .....	15
APPENDIX B – LABELING .....	19
APPENDIX C – EXAMPLE INVENTORY FORM .....	20
APPENDIX D – CHEMICAL USAGE DOCUMENTATION.....	21
APPENDIX E – DEPARTMENT SPECIFIC TRAINING FORM EXAMPLES.....	22
APPENDIX F – NON-ROUTINE TASK TRAINING DOCUMENTATION .....	26

# INTRODUCTION

## Foreword

---

In 1970, the United States Congress established the right of workers to "safe and healthful working conditions" through the Occupational Safety and Health Act. This act created the Occupational Safety and Health Administration (OSHA). House Bill 308 incorporates by reference all federal OSHA standards found in the Code of Federal Regulations (CFR), Title 29 Parts 1910, 1926 and 1928 as Ohio Public Employment Risk Reduction Standards. All adopted Ohio Employment Risk Reduction Standards are found in Chapter 4167 of the Ohio Revised Code and the Ohio Administrative Code.

This program has been established by Bowling Green State University to comply with Ohio's Public Employment Risk Reduction Act, which adopted OSHA's Hazard Communication Standard, 29 CFR 1910.1200, as well as compliance with all other state and local regulations.

## Objective

---

The objective of this program is to classify chemical hazards and prevent occupational injuries and illnesses related to chemical exposure by educating employees regarding workplace chemical hazards. This program highlights the methods of communicating these hazards through container labeling and other forms of warning, safety data sheets (SDSs), and training.

## Applicability

---

Employees, operations, and substances subject to the hazard communication requirements include:

- Non-research university employees who work in non-laboratory or industrial work areas or operations where hazardous chemicals are used, handled or stored (examples: maintenance shops, custodial operations, art studios, etc.)
- Laboratories that primarily provide quality control analyses for manufacturing processes or that produce hazardous chemicals for commercial purposes (examples: laboratories that produce research products sold outside of the university)

Laboratories that meet the "laboratory use" or "laboratory scale" definition in regards to chemical usage are covered under OSHA's Occupational Exposures to Hazardous Chemicals in Laboratories standard, 29 CFR 1910.1450, and BGSU's Laboratory Safety and Chemical Hygiene Plan requirements. These are laboratories where the following are met:

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

Laboratories that do not meet the definition above, such as those whose functions are to produce commercial quantities of chemicals or are connected with production processes (i.e. quality control laboratories) still have to meet the following under OSHA's Hazard Communication Standard:

- Ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;
- Maintain any SDSs that are received with incoming shipments of hazardous chemicals, and ensure that they are readily accessible during each work shift to laboratory employees when they are in their work areas;
- Ensure that laboratory employees are provided information and training in accordance with the standard, except for the location and availability of the written hazard communication program; and
- If the laboratory ships hazardous chemicals, it must meet the label and SDS requirements in the standard.

Operations where chemicals are only handled in sealed containers and are not opened under normal conditions are partially exempt from the regulatory requirements. Such operations could include warehouses, store rooms, and shipping and receiving. Requirements in these areas still include:

- Ensuring labels are not removed or defaced;
- Maintaining SDSs and ensuring they are readily accessible during the work shift; and
- Training employees on how to protect themselves in the event of a spill or leak of a hazardous chemical from a sealed container.

Exempted substances from the standard include:

- Hazardous waste;
- Tobacco or tobacco products;
- Wood or wood products;
- Articles;
- Food, drugs or cosmetics intended for personal use; and
- Consumer products used in the workplace when used as a normal consumer would (example: white out, glass cleaner, spray paint for short, one-time applications, etc.). Employee exposure to the product cannot be significantly greater than consumer exposure.

## **Responsibilities**

---

Immediate Supervisors are responsible for:

- Ensuring all hazardous chemical containers in their employees' work location(s) are properly labeled;
- Conducting, maintaining, and updating required hazardous chemical inventories;

- Ensuring SDSs for all hazardous chemicals in their employees' work location(s) are maintained, updated, and available to all employees at all times. If the manufacturer or distributor has not supplied a SDS, the supervisor is responsible for obtaining one; and
- Ensuring that all of their employees receive proper training as specified in this program.

Employees are responsible for:

- Only using chemical containers that are properly labeled;
- Notifying their immediate supervisor if labels are missing or inadequate;
- Notifying their immediate supervisor if SDSs are not available, or are inadequate;
- Using hazardous chemicals in a manner consistent with its labeling instructions; and
- Attending any required training.

Environmental Health and Safety (EHS) is responsible for:

- Developing this program and training associated with it;
- Assisting departments and areas with implementation of this program;
- Providing training to affected employees; and
- Reviewing this program on an annual basis at a minimum making updates where needed.

Contractors completing work for BGSU are responsible for:

- Complying with all facets of OSHA's Hazard Communication Standard;
- Maintaining immediate access to SDSs in the event a BGSU Project Manager or representative requests a copy; and
- Supplying a BGSU Project Manager or representative with a copy of the contractor's Hazard Communication Program upon request.

BGSU Project Managers (any individual who hires/contracts with an outside firm to work on campus) are responsible for:

- Providing the contractor with access to SDSs for BGSU hazardous chemicals present in the area the contractor will be working in;
- Informing the contractor of any precautionary protection measures that BGSU is aware of in regards to the hazardous chemicals present in the area the contractor will be working in during the workplace's normal operating conditions and in foreseeable emergencies; and
- Informing the contractor of BGSU's labeling system (providing a copy of this program will suffice).

## **Program Enforcement**

---

A violation of a University employee's responsibility must be reported to the employee's immediate supervisor for appropriate action. A violation of an outside contractor's responsibility must be reported to the applicable BGSU Project Manager and is subject to the conditions documented in the contract.

## LABELING HAZARDOUS CHEMICALS

### Content Requirement

---

Original (primary) containers are required to be properly labeled by the manufacturer so they should be received with all required labeling information. Once that product leaves its original container, it becomes a secondary container (i.e. spray bottles) and must be properly labeled as well.

Employees must ensure that all containers have EITHER the original manufacturer's label or a supplemental label affixed to it. The manufacturer's label will contain the product identifier, signal word, hazard statement(s), pictogram(s), precautionary statement(s), and manufacturer information. OSHA gives basic guidance on what information secondary labels should contain so to maintain consistency across the university, this label shall provide at a minimum per BGSU policy the product identifier, signal word, hazard statement(s), and name of manufacturer. Secondary labels, in conjunction with other information available under this program, are required to provide employees with specific hazard information about the chemical. An example secondary label for "Acetone" can be found below (see Appendix B for more information on labeling).

<p style="text-align: center;"><b>Acetone</b> DANGER Highly flammable liquid and vapor Causes serious eye irritation May cause drowsiness or dizziness May cause damage to organs through prolonged or repeated exposure <u>Manufacturer:</u> Fisher Scientific</p>
---

Employees must not remove or deface labels on incoming containers of hazardous chemicals. Labels must be legible, in English and prominently displayed on the container. Chemical formulas, abbreviations, structures and generic names (e.g., organic solvents) cannot be used solely to identify hazardous materials but can be used in addition to the product identifier if one chooses. Labels shall be updated upon receipt of significant information changes regarding the chemical hazards. Employees must report any deficiencies to their supervisors.

Labels are not required on secondary containers intended for the immediate use (within the same shift) by the person performing the transfer. Examples of these containers include measuring cups, transfer containers, mixing jugs, mop buckets, etc.

Note: If departments still have non-expired containers of hazardous chemical product with older HMIS or NFPA labeling, no need to discard. One should make a good faith effort to acquire an updated SDS and conform to the new GHS labeling requirements on any secondary containers that are generated and warrant labeling.

## Generating Labels

---

Since primary containers should already be labeled by the manufacturer, departments need only decide how they intend to label secondary containers that will be stored for use across multiple work shifts. Other than content, legibility, and written in English as described in the previous section, there are no rules on the label itself. Some examples of how this can be accomplished include but are not limited to:

- Requesting extra labels from the manufacturer; or
- Creating an a label internally, which can be accomplished in many different ways:
  - Using the University’s SDS management program, Chemwatch, which has label creation capability (many different sizes of Avery labels and custom options). Please note that you must be on campus to use this program and a link to it can be found on EHS’s website.
  - Creating a handwritten/typed paper or “Avery” sticky label. If using paper, apply clear tape over the whole label to help keep it in good condition and legible.
  - If working with really small containers, one may exercise creative techniques to relay the required information. This may involve a name only on the container in conjunction with hanging a poster or creating a book for the area that lists all of the other required label information. If utilizing an option such as this, ensure all employees in the area are trained on how to obtain the required information.

## INVENTORIES AND SAFETY DATA SHEET REQUIREMENTS

### Inventories

---

Supervisors/managers of areas/departments must create, maintain, and update a current list of hazardous chemicals used in their local operations that contains a product identifier that is referenced on the appropriate SDS at a minimum. A sample hazardous chemical inventory form can be found in Appendix C (mainly for those keeping paper SDSs). Keeping a SDS inventory in Chemwatch will suffice this requirement. Consumer products (i.e. WD-40, Windex, etc.) must be included in the chemical inventory if the employee exposure to the product is significantly greater than the typical consumer exposure during use of the product. For example, if Windex is used on a large scale such as an employee cleaning all windows in multiple buildings, that is a higher quantity and frequency than what the typical consumer would use the product for.

### Safety Data Sheets

---

SDSs must be available for all hazardous chemicals entered on the department's chemical inventory list. Managers/supervisors must ensure the most recent version of each SDS is available and readily accessible during all work shifts. SDSs are typically made available via hard copy in a binder or electronically via the university's Chemwatch system. Ask your manager/supervisor how to access SDSs in your specific area. If any electronic option is chosen as the only means by which SDSs will be available in the work area, managers/supervisors must ensure all of the following are met:

- SDSs are readily accessible and there are no barriers to employee access. This includes ensuring that reliable devices are readily accessible in the workplace at all times.
- Workers are trained in the use of any devices, including specific software.
- An adequate back-up system is available for rapid access to hazard information in the event of an emergency such as power-outages, equipment failures, online access delays, etc.
- The system of electronic access is part of the overall hazard communication program of the work area.
- Employees are able to obtain hard copies of SDSs, if needed or desired.
- Mechanisms are immediately available to provide emergency response personnel with hard copies of SDSs.
- A SDS book remains in the area with specific instructions inside on how to access the SDSs electronically.

SDSs have a consistent 16-section format:

**Section 1 - Identification** includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.



**Section 2 - Hazard(s) identification** includes all hazards regarding the chemical; required label elements.

Note: If hazard categories are noted on a SDS, the smaller the number, the greater the hazard with “1” being the most hazardous on a scale of 1-4.

**Section 3 - Composition/information on ingredients** includes information on chemical ingredients; trade secret claims. Manufacturers and importers may withhold the specific chemical identity of a hazardous chemical with certain “*trade secret*” provisions. Contact BGSU’s EHS department for assistance with addressing “trade secret” information.

**Section 4 - First-aid measures** includes important symptoms/ effects, acute, delayed; required treatment.

**Section 5 - Fire-fighting measures** lists suitable extinguishing techniques, equipment; chemical hazards from fire.

**Section 6 - Accidental release measures** lists emergency procedures; protective equipment; proper methods of containment and cleanup.

**Section 7 - Handling and storage** lists precautions for safe handling and storage, including incompatibilities.

**Section 8 - Exposure controls/personal protection** lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

**Section 9 - Physical and chemical properties** lists the chemical's characteristics.

**Section 10 - Stability and reactivity** lists chemical stability and possibility of hazardous reactions.

**Section 11 - Toxicological information** includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

**Section 12 - Ecological information**

**Section 13 - Disposal considerations**

**Section 14 - Transport information**

**Section 15 - Regulatory information**

**Section 16 - Other information** includes the date of preparation or last revision.

**Retention:**

SDSs need not be retained for any specified period of time as long as the chemical name and where and when it was used is retained for a period of 30 years from the date it became obsolete or no longer used. If this cannot be accomplished, a physical copy of the SDS must be retained for 30 years. Managers/supervisors can use discretion on how this is accomplished in their respective areas. EHS's recommendation would be to do one of the following:

1. Handwrite on the SDS the day it became obsolete or no longer used in the respective area, scan the full document, and retain it electronically for 30 years from that date.
2. Utilize Appendix D to document the full product identifier/name, where it was used, and approximate date the usage ceased. Retain this document electronically for 30 years and the SDS can be discarded.

## TRAINING

### Routine Tasks

---

EHS developed an *online* hazard communication training module that employees are required to take immediately upon hire if they will be working with hazardous chemicals and every three years thereafter as a refresher. These training records are maintained electronically and the training content includes at a minimum:

- a. The details of this program and how to access it;
- b. How to read labels on containers shipped to the university;
- c. Workplace labeling requirements;
- d. SDS format and section explanation, including the order of information and how employees can obtain and use the appropriate hazard information; and
- e. Training requirements.

Department level training must also occur immediately upon hire and whenever a new chemical hazard the employees have not previously been trained on is introduced into their work area. Information and training may be designed to cover categories of hazards (i.e. flammability, carcinogenicity, etc.) or specific chemicals. This level of training shall be developed, administered, and documented by affected departments and include the following at a minimum (an example form can be found in Appendix E):

- a. Operations where hazardous chemicals are present;
- b. The location and availability of the required list of hazardous chemicals and SDSs;
- c. Signs and symptoms of exposure;
- d. Methods and observations that may be used to detect the presence or release of a hazardous chemical. This could include industrial hygiene monitoring, continuous monitoring devices, visual appearance, odors of chemicals, etc.;
- e. Information on the physical, health, simple asphyxiation, combustible dust, and pyrophoric gas hazards, as well as hazards not otherwise classified;
- f. Specific procedures to protect employees from exposure such as safe work practices, standard operating procedures (SOPs), emergency procedures, use of personal protective equipment, etc.; and
- g. Procedure to be used for addressing non-routine tasks involving hazardous chemicals.

Training must be documented and records retained until the individual is no longer employed with the university. At a minimum, the training record shall include:

- a. Name of individual(s) trained;
- b. Name of individual(s) providing training for instructor-led courses;
- c. Date of training; and
- d. Brief description of training topics covered.

## **Non-Routine Tasks and Unlabeled Pipes**

---

Periodically, employees are asked to perform non-routine tasks. Prior to engaging in these types of tasks, managers/supervisors shall supply each affected employee with information on all potential hazards the employee could encounter. Such information must include the following:

- Specific chemical hazards;
- Protective equipment required, and its proper use;
- Safety procedures that must be followed;
- Emergency procedures that may be needed; and
- Any measures taken by the university to lessen the hazards.

In addition, if there are any unlabeled pipes containing hazardous chemicals in an area in which employees will be working, supervisors/managers are responsible for providing hazard information and precautionary measures to prevent or minimize exposure including in the event of an emergency situation such as a major leak or break in the line. All information/training provided for above circumstances shall be documented as mentioned for routine tasks (an example form can be found in Appendix F).

Employees will be instructed not to perform any task or procedure, or to use any substance or equipment for which they have not received training.

## **General Chemical Safety**

---

Assume all chemicals are hazardous until proven otherwise. Use chemicals in as small of quantities as possible to minimize exposure and reduce possible harmful effects. The following general safety rules shall be observed at a minimum when working with chemicals:

- Read and understand the SDS(s);
- Keep the work area clean and orderly;
- Observe good personal hygiene habits by washing hands before eating, drinking, smoking or applying cosmetics;
- Use the necessary safety equipment;
- Carefully label every container with the identity of its contents and appropriate hazard warnings;
- Store incompatible chemicals in separate areas;
- Substitute less toxic chemicals whenever possible;
- Limit the volume of volatile or flammable chemicals to the minimum required; and
- Preplan for containment of the chemical should a spill occur.

## **CONTRACTORS**

If BGSU or a contractor will be producing, storing, or using hazardous chemicals in such a way that employees of the other company could be exposed, the company creating the potential exposure shall make available to the affected one upon request:

- A copy of the company's written Hazard Communication program;
- Copies of SDS(s);
- Information on any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies; and
- Information on the labeling system to be used.

It is the Project Manager's responsibility to ensure that this information is transferred between companies as necessary. Contractors shall also make sure that all chemical containers are properly labeled and that SDSs are always available immediately upon request.

## **EMERGENCY PROCEDURES**

For medical, spill, fire, and other emergencies, call BGSU's Police department directly (419-372-2346). They will dispatch help from other entities if needed. If 9-1-1 is dialed from a cellular device, the call will first go to the Wood County Sheriff's office. Once they determine the emergency is on BGSU's campus, the call will be forwarded to BGSU's Police department delaying response time. In contrast, calling 9-1-1 from a BGSU landline will go directly to BGSU's Police department. For more information on specific emergencies, please refer to BGSU's Emergency Procedures poster, which can be found on EHS's website.

If contractors need more information or have questions, they should contact the BGSU Project Manager they are working with.

## APPENDIX A - DEFINITIONS OF TERMS

NOTE: These are terms found in this program, OSHA's Hazard Communication standard, and/or utilized in a SDS.

Article means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

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.

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.

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 chemical that is a physical or health hazard, 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.

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.

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.

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

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.

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.



Physical hazard means a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas.

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.

Safety data sheet (SDS) means written or printed material concerning a hazardous chemical that is prepared in accordance with paragraph (g) of this section.

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.

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.

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.


## APPENDIX B – LABELING

### GHS Pictograms

The Hazard Communication Standard requires pictograms on manufacturer labels to alert users of the hazards associated with hazardous chemicals. Pictograms consist of a symbol on a white background with red border and represents a specific hazard. Pictograms are determined by the chemical hazard classification scheme found in [Appendix A](#) and [B](#) of the standard.

Pictograms can be downloaded directly from <https://www.osha.gov/dsg/hazcom/pictograms/index.html>.

GHS- Hazard Pictograms and Related Hazard Classes		
		
<b>Expanding Bomb</b> <ul style="list-style-type: none"> <li>•Explosives</li> <li>•Self-reactives</li> <li>•Organic peroxides</li> </ul>	<b>Corrosion</b> <ul style="list-style-type: none"> <li>•Skin corrosion/burns</li> <li>•Eye damage</li> <li>•Corrosive to metals</li> </ul>	<b>Flame Over Circle</b> <ul style="list-style-type: none"> <li>•Oxidizing gases</li> <li>•Oxidizing liquids</li> <li>•Oxidizing solids</li> </ul>
		
<b>Gas Cylinder</b> <ul style="list-style-type: none"> <li>•Gases under pressure</li> </ul>	<b>Environment</b> <ul style="list-style-type: none"> <li>•Aquatic toxicity</li> </ul>	<b>Skull &amp; Crossbones</b> <ul style="list-style-type: none"> <li>•Acute toxicity (fatal or toxic)</li> </ul>
		
<b>Exclamation Mark</b> <ul style="list-style-type: none"> <li>•Irritant (eye &amp; skin)</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>	<b>Health Hazard</b> <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>	<b>Flame</b> <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>

SAMPLE LABEL	
<p style="text-align: center; color: #000080;"><b>PRODUCT IDENTIFIER</b></p> <p><b>CODE</b> Product Name _____</p> <p style="text-align: center; color: #000080;"><b>SUPPLIER IDENTIFICATION</b></p> <p>Company Name _____ Street Address _____ City _____ State _____ Postal Code _____ Country _____ Emergency Phone Number _____</p> <p style="text-align: center; color: #000080;"><b>PRECAUTIONARY STATEMENTS</b></p> <p>Keep container tightly closed. Store in cool, well ventilated place that is locked. Keep away from heat/sparks/open flame. No smoking. Only use non-sparking tools. Use explosion-proof electrical equipment. Take precautionary measure against static discharge. Ground and bond container and receiving equipment. Do not breathe vapors. Wear Protective gloves. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Dispose of in accordance with local, regional, national, international regulations as specified.</p> <p><b>In Case of Fire:</b> use dry chemical (BC) or Carbon dioxide (CO<sub>2</sub>) fire extinguisher to extinguish.</p> <p><b>First Aid</b> If exposed call Poison Center. If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.</p>	<p style="text-align: center; color: #000080;"><b>HAZARD PICTOGRAMS</b></p> <p style="text-align: center;"></p> <p style="text-align: center; color: #000080;"><b>SIGNAL WORD</b> <b>Danger</b></p> <p style="text-align: center; color: #000080;"><b>HAZARD STATEMENT</b> <b>Highly flammable liquid and vapor.</b> <b>May cause liver and kidney damage.</b></p> <p style="text-align: center; color: #000080;"><b>SUPPLEMENTAL INFORMATION</b></p> <p><b>Directions for use</b> _____ _____</p> <p>Fill weight: _____ Lot Number _____</p> <p>Gross weight: _____ Fill Date: _____</p> <p>Expiration Date: _____</p>

### GHS Label

GHS labels include the following elements:

- Product identifier
- Hazard pictograms
- Precautionary statements
- Hazard statement
- Signal word
- Supplier identifier
- Supplemental information

Information taken from [Cal/OSHA Quick Card](#).





APPENDIX E – DEPARTMENT SPECIFIC TRAINING FORM EXAMPLES

**Locations**

Department/Area Name \_\_\_\_\_ Building/Location \_\_\_\_\_

Immediate Supervisor \_\_\_\_\_ Employee Name \_\_\_\_\_ Date \_\_\_\_\_

**Location of hazardous chemicals**

Operations or locations where hazardous chemicals are present:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Hazardous materials are stored in the following locations:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Location of supporting information**

BGSU's Hazard Communication Program is located \_\_\_\_\_

The department/area's hazardous chemical inventory list is located \_\_\_\_\_

The department/area's SDSs are located \_\_\_\_\_

## Chemical Specifics

Instructions: There are many different ways in which employees can receive training on specific chemicals in which they will be working with. The following page (Page 24) is a chart that supervisors can complete for chemicals used routinely in their operations and reviewed by affected employees. Alternatively, supervisors can choose to have the affected employees complete the chart and review it collectively upon completion for accuracy and understanding. Another option could be to have affected staff review all SDSs for the chemicals used in their area and sign off on a form stating they have done so. If the latter option is chosen, the form should indicate the names of the chemicals whose SDSs were reviewed (See Page 25). Regardless of which option is chosen, supervisors will need to ensure that any area/department specific procedures to protect employees from exposure such as safe work practices, standard operating procedures (SOPs), emergency procedures, and personal protective equipment are reviewed for each/all chemicals (documentation available for this as well on Page 25). This can be accomplished by grouping chemicals or covering each individually.







**APPENDIX F – NON-ROUTINE TASK TRAINING DOCUMENTATION**

Description of non-routine task(s) to be performed: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

Description of anticipated physical, health, or hazards not otherwise classified: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

Hazard precautionary or prevention measures (safety policies and procedures, personal protective equipment and proper use of it, measure taken by the university to lessen hazards, etc.): \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Description of any applicable emergency procedures: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

Information on any unlabeled pipes in the area: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

Other important information worth mentioning: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

Names of employee(s) performing the non-routine task(s) mentioned above	Signatures of employee(s) indicating the above information has been discussed	Date

\_\_\_\_\_  
 Supervisor's Name

\_\_\_\_\_  
 Supervisor's Signature

\_\_\_\_\_  
 Date