

HAZARD **COMMUNICATION PROGRAM**

(Non-Laboratory)

"YOUR-RIGHT-KNOW" CFR 29 1910.1200



OUR COMMITMENT

Baylor University recognizes the importance of safety and health and is committed to providing a workplace for our employees in which recognized hazards are controlled.

The philosophy and objectives behind this commitment are:

- > The safety and health of all employees is our priority.
- > The only acceptable level of safety performance is one that prevents injury.
- Safety is an integral part of the University's functions that cannot be separated or bypassed.
- > Safety is a responsibility that must be shared equally and without exception by everyone.

Safety is Everyone's Responsibility.

All employees are required to make safety of their fellow employees, students and visitors a priority. As a condition of employment, every employee will be expected to conduct their daily work activities in a manner that is consistent with the philosophy and objectives of this policy.

Employees may provide safety and health input without fear of reprisal. Anyone having comments, suggestions or questions regarding this program or any other printed safety material, may call the Campus Safety Manager at (254) 709-1991 or the Environmental Health and Safety Department at (254) 710-2900.

Thank you for striving to make all workplaces safe!

PURPOSE

It is Baylor University's directive to maintain and enforce a written Hazard Communication Program. This program was developed to ensure that the hazards of chemicals used at all facilities are evaluated, and that information concerning their hazards is transmitted to employees in accordance with the OSHA Code of Federal Regulations, Title 29 Section 1910.1200.

By doing this, we hope to make all employees aware of the chemical exposures (actual or potential) and related risks at the facility and inform all affected of the appropriate protective measures available to them.

INTRODUCTION

(Baylor University's laboratories fall within the guidance and compliance of the OSHA lab standard. Examples of non-lab areas: machine shops, theatre shops and facility shops.)

It is the intent of the University to identify all physical and health hazards at their campus facilities. Most chemicals have a potential hazard associated with use. The primary means of identifying the chemical hazards is referring to the Safety Data Sheets (SDS) produced by the manufacturers of the product. The SDS documents identify the chemical compounds that make up the product. They further identify the levels of safe tolerance, flammability, toxicity, reactivity, health hazards, physical hazards, controls and related issues.

Employees are provided with information about the hazards to which they are exposed, by means of the Hazard Communication Program, labeling and SDS information and training. This applies to all hazards and chemicals in the workplace. Management and all personnel are required to participate in the communication and training of all known hazards on an on-going basis, in accordance with both federal and state mandates.

RESPONSIBILITIES

Environmental Health and Safety Department – oversee the development, implementation, review and carrying-out of this program.

Upper Management

- Ensure compliance with this program;
- Conduct immediate corrective action for deficiencies found in the program;
- Maintain an effective Hazard Communication training program; and
- Make this program available to employees or their designated representative.



Shipping/Receiving Personnel

- Ensure all received containers are properly labeled and that labels are not removed or defaced;
- Ensure all shipped containers are properly labeled and appropriate hazard warnings are noted; and
- Ensure received Safety Data Sheets (SDS) are properly filed and distributed.

Departmental designated Safety Representative

- Monitor employee training to ensure effectiveness;
- Keep management informed of necessary changes;
- Maintain the SDSs;
- Monitor facility for proper use, storage and labeling of chemicals; and
- Ensure employees have access to the Safety Data Sheets.

Mangers/Supervisors

- Comply with all specific requirements of the program;
- Provide and conduct Job Hazard Analysis;
- Provide specific chemical safety training for assigned employees;
- Ensure chemicals are properly used, stored & labeled;
- Ensure only the minimum amount of a chemical necessary for efficient use is kept at work stations;
- Inform employees of the locations and availability of SDSs; and
- Ensure chemical inventory is accurate.

Employees

- Comply with chemical safety requirements of this program;
- Report any problems with storage or use of chemicals to your supervisor;
- Immediately report spills or suspected spills of chemicals to your supervisor;
- Use only those chemicals for which they have been trained;
- Use chemicals only for specific assigned tasks in the proper manner;
- Use the proper personal protective equipment as required;
- Ensure containers are properly labeled; and
- No outside chemical allowed without proper notification and approval from your supervisor.

Students

- While not covered by the OSHA standards all HazCom protocols are to be followed by students after being informed and trained by members of faculty/staff;
- Comply with chemical safety requirements of this program;
- Report any problems with storage or use of chemicals;
- Immediately report spills or suspected spills of chemicals;
- Use only those chemicals for which they have been trained;
- Use chemicals only for specific assigned tasks in the proper manner;
- Use the proper personal protective equipment as required;

- Ensure containers are properly labeled; and
- No outside chemicals allowed to be brought to university property without evaluation and approval by all appropriate faculty/staff.

Contractors

- Must have a HazCom program for their company;
- Contractors must train their employees and document accordingly; and
- Monitor and ensure proper storage and use of chemicals is taking place.

SECTION 1: EXPOSURE DETERMINATION

To determine what hazards are present or likely to be present which necessitates special training, a Job Hazard Analysis (JHA) shall be performed by the Department Mangers/Supervisors.

This assessment includes but is not limited to; work description; potential accidents or hazards; control measures; personal protective equipment and training.

It is the responsibility of the Manager/Supervisor to assess the workplace(s) situation annually and/or as necessary by: evaluating new equipment and processes; reviewing accident records; evaluating the suitability of previously selected personal protective equipment; and reviewing and working with Baylor EHS to update written safety programs as needed in an on-going effort to reflect new and/or revised tasks and procedures.

SECTION 2: EMPLOYEE TRAINING

Safety training is accomplished so that every employee knows the nature and extent of the potential hazardous chemicals they work with, and their roles and responsibilities for maintaining safe working conditions. The training requirements for hazardous chemicals and personal protective equipment are summarized below.

All employees who are exposed to potentially hazardous substances will be provided with information and training on the chemicals in their work area. To meet this goal, each department's Manager/Supervisor are responsible for training all affected employees.

The Campus Safety Manager enrolls all employees working within the parameters of the HazCom program in the EHS computer-based safety program. The training modules that are assigned to these affected employees to complete are the following:

- Baylor Hazard Communication Program
- Hazard Communication (HazCom)
- Personal Protective Equipment (PPE)

In addition, each department must evaluate individual job tasks and work stations to ensure that work activities can be accomplished without exceeding the physical capabilities of individual workers. This is an element that must be incorporated in the hands-on training aspects of this program.

Safety training must include:

- An explanation of the contents, location and availability of the written Hazard Communication Program;
- An explanation of Safety Data Sheets (SDS);
- An explanation, locations and how to review/retrieve an SDS;
- The physical and health hazards of the chemicals in the workplace;
- First Aid policies and procedures following a hazardous substance exposure;
- An explanation of the labeling system used;
- Personal Protective Equipment; and
- Emergency procedures in the event of an accident involving a hazardous chemical.

Training is completed for new hires at the time of their initial assignment, and whenever a new work practices the employee has not previously been trained about is introduced into their work area.



Safety Data Sheets (SDS)

OSHA requires chemical manufactures, importers and distributors of hazardous substances, to provide an appropriate SDS. All SDS documentation is in English and contains the information specified in the Code of Federal Regulations, Title 29, Section 1910.1200.

Hard copies of the SDS sheets will be kept in each department for immediate access. Contact your Supervisor first, then if additional assistance is needed contact Baylor EHS.

Each Departmental Manger/Supervisor is responsible for:

- Not accepting any product without a SDS, the distributor must be notified immediately if an SDS does not accompany a shipment of the product;
- All sample products brought on the property by a distributor for product testing shall be accompanied by an SDS;
- Ensure that all new information is passed onto affected Employees; and
- The accuracy of their department chemical inventory.

Employees are trained in how to effectively read and understand the SDS and specific training will be held by the employee's department Supervisor.

Container Labeling

Under the Hazard Communication Standard (HCS), 29 CFR 1910.1200, the manufacturer, importer, or distributor is required to label each container of hazardous chemicals. Therefore, each container of hazardous chemicals received should have existing labels that comply with the requirements of the rule.

It is the policy of Baylor University that no container of hazardous substances be released for use until the following information is verified:

- Identity of the hazardous chemical;
- Appropriate hazard warnings; and
- Name and address of the chemical manufacturer, importer, or other responsible party.

It is the responsibility of the Receiving Personnel in conjunction with the affected department Manager/Supervisor to ensure that all labels or other forms of warnings are legible and prominently displayed on incoming containers of hazardous substances.

Each department Manager/Supervisor must ensure that all secondary containers are labeled with either an extra copy of the original manufacture's label or a generic label. A generic label may be a sign, placard, process sheet, batch ticket, operating procedure or other written material, if the alternative method identifies the container to which it is applicable and includes the identity of the hazardous substance and appropriate hazard warnings. All labeling must coincide with the new Globally Harmonized System for chemical identification.

No person may remove or deface the labels, unless they are immediately and properly relabeled.

Labels or other forms of warnings must be in English, but may include another language in addition to English, if applicable. The labels must be understandable and prominently displayed. It is extremely important that all containers of chemicals are properly labeled. This includes every type of container from a bulk storage tank to a small spray bottle. Materials, which cannot be individually labeled, must have the storage areas labeled. If materials are transferred into other containers, the employer must ensure that these are labeled as well, unless they fall under the portable container exemption (1910.1200 (f)(7)). In terms of labeling systems, its best to simply use the labels or labeled containers that is provided by your supplier(s).

The following requirements apply but are not limited to:

- Identity of the hazardous chemical;
 - Corresponds to the SDS
- The physical and health hazard warnings; and
- Portable containers, which contain a small amount of chemical, need not be labeled if they are used immediately, but must be under the strict control of the employee using this product.
 - *Example: If you (the employee) are mixing a bucket of bleach and water for cleaning, this bucket must remain with you (the employee) always. If you go on break leaving this bucket behind, it MUST be labeled or discarded.*

Hazard of Non-Routine Task

Periodically, employees are required to perform hazardous non- routine tasks. Prior to starting work on such projects, each affected employee must be given information by their Supervisor about the hazards to which they may be exposed to during such activity. 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.

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.

Emergency and Spills

In case of a chemical spill, immediately leave the area and contact the Baylor Police Department (254-710-2222). If necessary, the Baylor Police will implement the appropriate Emergency Action Plan. The EHS Hazardous Materials Manager, Director, and/or Campus Safety Manager will be contacted by the Baylor Police to respond. When a notification is necessary the following information needs to be relayed:

- Identify employee(s) and student(s);
- Evacuate out of immediate area;
- Notify employees and students in the immediate area to keep out;
- Remove any soaked garments and thoroughly wash the effected skin with soap and water; and
- IF IT'S SAFE TO DO! Any spark or flame producing operation should be shut down within the vapor-spread area of the spill;
 - NOTE: Flammable liquid vapors are often heavier than air and spread naturally along the floor from higher to lower elevations. Ignition sources below and even some distance away from a spill may be vulnerable.

Affected Department

- Notify Baylor Police and EHS and await further instructions;
- Identify the substance / chemical spill;
- Do not attempt to clean the spill up;
- Obtain the required personal protective equipment; and
- If the hazards are **NOT** too great and are manageable with proper procedures and protective equipment, employees may follow control and decontamination procedures according to the SDS only with the approval and assistance of the EHS Hazardous Material Manager.

SECTION 3: PERSONAL PROTECTIVE EQUIPMENT (PPE)

Engineering controls and work practices are used to eliminate/minimize hazardous occupational exposures. Where occupational exposure remains after institution of engineering controls, PPE must be used. Designed with your safety in mind, PPE shall be distributed at no cost to every affected Employee.

Gowns, protective eye wear, shoe covers, gloves, and other optional equipment shall be considered appropriate only if it does not permit potentially hazardous chemicals to pass through or otherwise reach the employee's clothing, skin, eyes, mouth or respiratory system under normal conditions of use.

The Department Manger shall ensure that training is conducted for each newly hired and/or newly assigned employee who may be exposed to workplace hazards which require the use of PPE. Each affected employee shall be trained to know at least the following:

- The hazards present in the workplace;
- When PPE is necessary;
- The limitations of PPE;
- How to don, doff, adjust, and wear PPE; and
- The proper care, maintenance, useful life and disposal of PPE.

Each affected employee must demonstrate an understanding of the training and the ability to use PPE properly before being allowed to perform work activities requiring the use of such equipment. If the department Manager or Supervisor has reason to believe that any affected employee who has already been trained, does not have the understanding and skill required, the department Manager or Supervisor must retrain that employee.

Each department Manager shall ensure that all PPE is cleaned, laundered, and disposed of by each employee having been issued such equipment. The departments at no cost shall make repairs and replacements to the employees PPE.

SECTION 4: GENERAL CHEMICAL SAFETY

Assume all chemicals are potentially hazardous. Use chemicals in small quantities to minimize exposure and reduce possible harmful effects. The following general safety rules shall be observed when working with chemicals, but are not limited to:

- Read and understand the Safety Data Sheets;
- Keep the work area clean and orderly;
- Use the appropriate 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 materials whenever possible;
- Limit the volume of volatile or flammable material to the minimum needed for short operation periods; and
- Provide means of containing the material if equipment or containers should break or spill their contents. (spill kit)

Chemical Handling

It is imperative that all employees follow safe chemical handling procedures; refer to the specific chemical SDS. Employees must wear the PPE provided by the employer and shall follow all engineered controls while handling, using, or dispensing chemicals. All waste materials must be placed into the appropriate waste container and be properly labeled. The EHS Hazardous Material Manager will be consulted and utilized in all hazardous waste operations.

Chemical Storage

The separation of chemicals during storage is necessary to reduce the possibility of unwanted chemical reactions caused by accidental mixing. Use either distance or barriers (e.g., trays) to isolate chemicals into the following groups:

- Flammable Liquids: store in approved flammable storage lockers or flammable storage rooms;
- Acids & Bases: store in approved corrosive storage lockers or corrosive storage rooms;
- Acids and bases must not be stored together or with other incompatible materials; and
- Other liquids: ensure other liquids are not incompatible with any other chemical in the same storage location.

Personal Hygiene

In addition to proper handling procedures, it is important for all employees to observe good personal hygiene habits. Wash your hands before eating, drinking, smoking or applying cosmetics. Handle chemicals with care. Always refer to the SDS for special protection information.

Housekeeping

- Maintain the smallest possible inventory of chemicals;
- Periodically review stock of chemicals on hand;
- Ensure that storage areas, or equipment containing large quantities of chemicals, are secure from accidental spills;
- Empty containers must be disposed of properly;
- Recycle unused laboratory chemicals wherever possible;
- DO NOT Place hazardous chemicals in salvage or garbage receptacles;
- DO NOT Pour chemicals onto the ground;
- DO NOT Dispose of chemicals through the storm drain;
- DO NOT Dispose of chemicals down sinks or sewer drains unless it is specifically stated on the SDS that it is an appropriate means of disposal; and
- DO consult the EHS for guidance and assistance.



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SECTION 5: CONTRACTOR(S)

Chemicals pose a wide range of health and physical hazards. OSHA's Hazard Communication Standard provides people the right-to-know the hazards and identities of the chemicals they are exposed to in the workplace. Upon request the contractor may review the university's Hazard Communication Program.

To ensure compliance by all contractor and/or sub-contractor employees, the following must be obtained prior to the start of each project, but not limited to:

- The contractor and/or sub-contractor will be responsible for assuring their employees are properly trained on the hazards they are working with or may encounter;
- Provide and ensure PPE is worn always;
- It will be the contractor's responsibility to ensure that all chemicals brought on property will be labeled; and
- All work practices must comply with applicable federal, state and local regulations.

SECTION 6: RECORDKEEPING

Training

The Campus Safety Manager enrolls all employees working within the Hazard Communication Program in initial computer-based training for completion and is responsible for appropriate recordkeeping.

Department managers shall ensure that effective information and training on all hazardous chemicals in the work area is provided at the time of the employee's initial assignment, and whenever a new physical or health hazard is introduced into their work area. An employee training sign off sheet or training verification e-mail shall be used to certify such training and must include the following information:

- Type of training received;
- Date(s) of training sessions;
- A summary of the training sessions;
- The names and qualifications of the person(s) conducting the training; and
- The names and job titles of the employees attending.

Safety Data Sheets (SDS)

SDS on all chemicals currently in use shall be made readily accessible during each work shift to all employees when they are in their work areas. SDS(s) will be retained for a period of thirty (30) years as required by the standard.

Chemical Exposure Incident

The medical record shall be preserved and maintained by Risk Management / HR for the duration of employment plus thirty (30) years for every employee who may have been exposed to a toxic substance or harmful physical agent through any route of entry during employment.

Risk Management / Human Resources must establish and maintain an accurate record for each employee with occupational exposure to hazardous chemicals or infectious materials. This record must include:

- The name and social security number of the employee; and
- A copy of all results of examinations, medical testing and follow-up procedures.

Employee medical records shall be available for inspection and review upon request by the Occupational Safety and Health Administration for examination and copying.

| Carcinogen Mutagenicity Reproductive toxicity Respiratory sensitizer Target organ toxicity Aspiration toxicity | Flammable Pyrophoric's Self-Heating Emits flammable gas Self-Reactive Organic Peroxide | Irritant to skin and eyes Skin sensitizer Acute toxicity Narcotic effects Respiratory tract irritant Hazardous to ozone layer |
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| \diamond | | |
| Gases under pressure | Skin corrosion or burns Eye damage Corrosive to metals | ExplosiveSelf-reactiveOrganic peroxide |
| | ¥2 | |
| • Oxidizer | Aquatic Toxicity | Acute toxicity |