PURPOSE

Climate Engineers, Inc. is committed to the prevention of chemical exposures that may result in injury and/or illness. The purpose of this program is to make sure that all affected employees understand the information concerning the dangers of all known hazardous chemicals used by Climate Engineers, Inc. and to protect company employees who may come in contact with hazardous chemicals while performing their job duties.

SCOPE

Climate Engineers strives to provide all employees with a safe and healthy workplace. This Hazard Communication Program is integrated into our company's written safety program, and is a collaborative effort that includes all employees. This safety program affects all company employees who may come in contact with hazardous chemicals or the physical health hazards posed by those materials while performing their job duties. This is accomplished by:

1. Identifying all hazardous materials within the facility.
2. Labeling all containers containing hazardous materials.
3. Providing Safety Data Sheets (SDSs) on all hazardous materials used in the work environment.
4. Training Climate Engineers employees to recognize and interpret labels, warnings, color coding, signs, etc. that are affixed to containers so that they can properly protect themselves against potential hazards.
5. Training employees to understand the elements of the SDS and to recognize possible risks to health and physical harm.
6. Making available this written program to any employee, upon request.
7. Training employees regarding how to recognize & work in NON-routine situations which pose a danger.

AUTHORITY AND RESPONSIBILITY

The Climate Engineers Safety Committee has the primary responsibility and authority for the implementation and enforcement of the Hazard Communication Program. All safety data sheet evaluations, implemented control measures for chemical handling, PPE requirements and training will be coordinated under the direction of the Safety Committee. The Safety Committee will monitor the results of the program to determine if additional areas of focus are needed. The Safety Committee will also:

1. Review and revise the Hazard Communication Program annually to assure compliance
2. Provide general information and training relating to Hazard Communication for affected Climate Engineers employees on an annual basis
3. Perform an annual chemical inventory to maintain and update the SDS
4. Developing and implementing a universal hazardous chemical labeling system
5. Establishing emergency procedures to properly handle hazardous material releases
6. Identification of appropriate personal protective equipment (PPE)

CLIMATE ENGINEER INC. SUPERVISORS ARE RESPONSIBLE FOR:

1. Notifying all Climate Engineers employees of the purpose and intent of the Hazard Communication Program
2. Assuring that affected employees are trained in General Hazard Communication
3. Providing department specific information and training relating to Hazard Communication for affected Climate Engineers employees
4. Providing personal protective equipment

AFFECTED EMPLOYEES ARE RESPONSIBLE FOR:

1. Complying with the Hazard Communication Program procedures

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2. Participating in the Climate Engineers General Hazard Communication training session and Department specific training sessions
3. Understanding how to read chemical labels and Safety Data Sheets
4. Understanding and taking necessary precautions when handling hazardous chemicals
5. Notifying the supervisor of torn, damaged or illegible labels or of unlabeled containers
6. Properly caring for personal protective equipment, including proper use, routine care and cleaning, storage, and replacement

EMPLOYEE TRAINING

Employees shall receive information and training on hazardous chemical in their work area at the time of their initial assignment, annual review, and whenever a new physical or health hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (i.e., flammability, carcinogenicity) or specific chemicals. Chemical-specific information shall always be available through labels and safety data sheets. Site Supervisors shall provide all General Hazard Communication Training.

This general training program shall provide an introduction to the following:

1. The existence and requirements of the OSHA Hazard Communication Standard
2. The details of the Hazard Communication program including an explanation of the labeling system and the safety data sheet and how employees can obtain and use the appropriate hazard information
3. The location and availability of the written Hazard Communication Program
4. Any operations in their work area where hazardous chemicals are present
5. The physical and health hazards of the chemicals in the work area
6. Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area
7. The measures employees can take to protect themselves from these hazards, including work practice controls, emergency procedures, and personal protective equipment
8. Department specific training shall be conducted upon employment, annually, and whenever a new hazard is introduced into an employee's work area

Department specific Hazard Communication Training shall be conducted within 30 days of employee initial assignment, whenever new hazards are introduced, and annual review is required. Training will be conducted by the Safety Manager. The training will include information on:

1. Specific chemical hazard classes found in the work area
2. Location of the Climate Engineers Hazard Communication Program within the department
3. Specific location and availability of the department's Safety Data Sheets
4. Available PPE and appropriate emergency procedures for chemicals found within the work area as outlined by the Safety Data Sheets
5. Location and availability of appropriate chemical labels

SAFETY DATA SHEETS

Safety Data Sheets are the primary data source intended to outline the special precautions and controls necessary for handling specific hazardous chemicals. Safety Data Sheets are typically provided by the chemical manufacturer or chemical supplier and divided into 16 sections. Information in the SDS should be presented using the following 16 headings in the order given below:

1. Identification
2. Hazard(s) identification
3. Composition/information on ingredients

4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and Storage
8. Exposure controls/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information

SDSs for new products will be obtained by the purchasing agent and forwarded to the safety manager. The safety manager will then update the master file with new SDSs. SDSs are automatically updated when a new version is created through a third party who maintains the Electronic Database System. On a quarterly basis, the Electronic Database System sends communication of updates made to inventory lists.

OBTAINING SDS

Safety Data Sheets are readily available upon request 24 hours a day and shall be accessible by one of the following methods:

1. Contacting the chemical manufacturer
2. Contacting the distributor who sold the hazardous material to Climate Engineers Inc.
3. Obtaining the shop SDS book
4. Obtaining SDSs electronically stored through https://www.sdsbinderworks.com/account/login/

Username: Climate
Password: sds

LABELING

To ensure that appropriate information concerning the hazards of a chemical or material are accessible to employees, all containers of hazardous chemicals shall be labeled. Labels shall be legible, in English (additional languages may be included as necessary), and prominently displayed on the container. Chemical manufacturers, importers, and distributors shall ensure that every container of hazardous chemicals entering the workplace is appropriately labeled with the identity of the hazardous chemical(s) which contains product identifier (common and/or chemical name), signal word, hazard statement(s), pictogram(s), precautionary statement(s), name, address, and telephone number of the chemical manufacturer, importer or other responsible party.

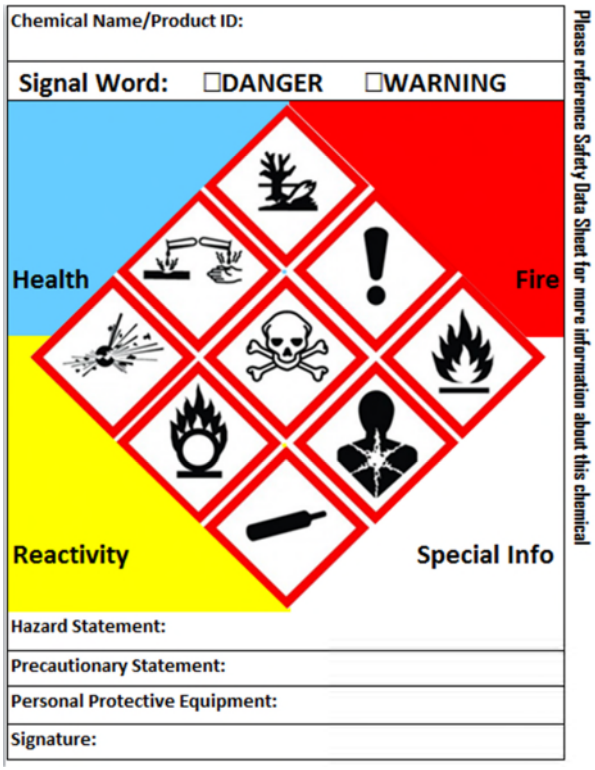
If a hazardous material label in the workplace becomes damaged, illegible, or is inadvertently removed from a container, it shall be replaced immediately by the supervisor or designee.

Replacement labels shall include, at a minimum, product identifier (common and/or chemical name), signal word, hazard statement(s), pictogram(s), precautionary statement(s), name, address, and telephone number of the chemical manufacturer, importer or other responsible party.

Climate Engineers will use the GHS labeling system for secondary containers. When a chemical is transferred from the original container to a portable or secondary container, the container will be labeled, tagged or marked with a GHS label containing the following information:

1. Product identifier
2. Signal word
3. Hazard statement(s)
4. Pictogram(s)
5. Precautionary statement(s)

Exception: Portable containers into which hazardous chemicals are transferred from labeled containers and that are intended for the immediate use of the employee who performs the transfer do not require a label. If the portable container will be used by more than one employee or used over the course of more than one shift, the container must be labeled; however, Climate Engineers Safety Committee strongly recommends that all secondary containers be labeled despite this exception.



Climate Engineer's Secondary Container Label

Hazard Communication Standard
Pictograms and Hazards

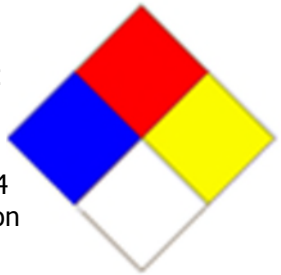
Health Hazard	Flame	Exclamation Mark
• Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity	• Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides	• Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non Mandatory)
Gas Cylinder	**Corrosion**	**Exploding Bomb**
• Gases under Pressure	• Skin Corrosion/ burns • Eye Damage • Corrosive to Metals	• Explosives • Self-Reactives • Organic Peroxides
Flame over Circle	**Environment (Non Mandatory)**	**Skull and Crossbones**
• Oxidizers	• Aquatic Toxicity	• Acute Toxicity (fatal or toxic)

GHS Symbols Meanings

To comply with labeling requirements, Climate Engineers Inc. has adopted the National Fire Protection Association (NFPA) labeling system.

The following colors are used to represent the hazards on the NFPA 704 label:

1. **Red** represents the fire hazard;
2. **Blue** represents the health hazard;
3. **Yellow** represents the reactivity hazard; and
4. **White** represents the specific hazard.



NFPA 704 Designation

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4	Deadly: even the slightest exposure to this substance would be life threatening. Only specialized protective clothing, for these materials, should be worn.
3	Extreme Danger: serious injury would result from exposure to this substance. Do not expose any body surface to these materials. Full protective measures should be taken.
2	Dangerous: exposure to this substance would be hazardous to health. Protective measures are indicated.
1	Slight Hazard: irritation or minor injury would result from exposure to this substance. Protective measures are indicated.
0	No Hazard: exposure to this substance offers no significant risk to health.

FLAMMABILITY	
4	Flash Point Below 73ºF and Boiling Point Below 100ºF: this substance is very flammable, volatile or explosive depending on its state. Extreme caution should be used in handling or storing of these materials.
3	Flash Point Below 100ºF: flammable, volatile or explosive under almost all normal temperature conditions. Exercise great caution in storage or handling of these materials.
2	Flash Point Below 200ºF: moderately heated conditions may ignite this substance. Caution procedures should be employed in handling.
1	Flash Point Above 200ºF: this substance must be preheated to ignite. Most combustible solids would be in this category.
0	Will Not Burn: substances that will not burn.

REACTIVITY	
4	May Detonate: substances that are readily capable of detonation or explosion at normal temperatures and pressures. Evacuate area if exposed to heat or fire.
3	Explosive: substances that are readily capable of detonation or explosion by a strong initiating source, such as heat, shock or water. Monitor from behind explosion-resistant barriers.
2	Unstable: violent chemical changes are possible at normal or elevated temperatures and pressures. Potentially violent or explosive reaction may occur when mixed with water. Monitor from a safe distance.
1	Normally stable: substances that may become unstable at elevated temperatures and pressures or when mixed with water. Approach with caution.
0	Stable: substances which will remain stable when exposed to heat, pressure or water.

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SAFETY PROCEDURES
Most of what a Climate Engineers employee need to know about a chemical is found on the label or on the SDS. But in addition to checking them before any job, there are a few safety basics that apply to all chemicals.

1. Follow manufacturer's instructions for chemicals and equipment
2. Follow company procedures on all jobs - no shortcuts
3. Keep chemical containers closed when not in use
4. Check containers regularly for leaks
5. Keep flammable and explosive materials away from heat sources
6. Check protective clothing to be sure there are no rips or tears before putting it on
7. Work with a partner on any potentially hazardous job
8. Keep food, drinks, and cigarettes out of the work areas
9. Wash thoroughly before eating, drinking, or smoking
10. Clean tools, equipment, and clothing that have been exposed to hazardous chemicals before they're used again
11. Dispose of all contaminated materials properly

SPECIFIC CHEMICALS
An important part of the Climate Engineers Haz-Com Program is identifying the specific chemicals which need to be addressed.

The following will be covered concerning specific chemicals:

1. how to detect the presence or release of the chemical
2. visual appearance or odor when being released
3. monitoring devices and what they indicate
4. description of the physical and health hazards of the chemical in the work area

NON-ROUTINE TASKS
Examples of hazardous non-routine tasks are:

1. Entering confined spaces
2. Working in a potentially explosive or toxic area

The safety manager and the immediate supervisor of an employee performing a nonroutine task, such as entering a tank, working around other process equipment, or confined spaces is responsible for ensuring that adequate training has been provided to the employee on any hazards associated with the nonroutine task. The training will also include proper precautions to take to reduce or avoid exposure. Employees share in this responsibility by ensuring that their immediate supervisor knows that the nonroutine task will be performed.

UNLABELED PIPES
Climate Engineers Inc. will inform employees of the hazards of the chemicals contained in unlabeled pipes in their work areas. Any employee, who does not know the contents of a pipe, will ask his or her supervisor.

MULTI-EMPLOYER WORKPLACES
It is the policy of Climate Engineers Inc. to provide other employers and contractors with any information concerning SDS(s) for chemicals that their employees may be exposed to.

The following information may be provided:

1. Copies of SDSs (or make them available at a central location) for any hazardous chemicals that the other employer(s)' employee may be exposed to while working.

2. Inform other employers of any precautionary measures that need to be taken to protect employees during normal operating conditions or in foreseeable emergencies.
3. Provide other employers with an explanation of the labeling system that is used at the work site.

HAZARD COMMUNICATION QUIZ

1) SDS stands for:
   A. Satisfaction Document Standard
   B. Safety Distribution System
   C. Safety Data Sheet

2) The Climate Engineers Inc. SDS book can be found in the field office trailer or electronically.

   True False

3) There are several ways exposure to a hazardous substance can occur, they are:
   A. Inhalation & Absorption
   B. Injection & Digestion
   C. All of the above

4) The purpose of labels on hazardous materials, or on products containing them, is to warn about potential danger.

   True False

5) Labels which have been covered up or fallen off must be replaced.

   True False

6) Each Climate Engineers employee has the right to know:
   A. about the hazards they may encounter on the job.
   B. effects of exposure to a hazardous substance.
   C. the hazards of the chemicals contained in unlabeled pipes.
   D. All of the above

7) No additional training is needed for Climate Engineers employees to enter a confined space.

   True False

8) Consuming food in the work area can lead to a hazardous material exposure.

   True False

9) Some of the Climate Engineers safety procedures include:
   A. Dispose of all contaminated materials properly
   B. Check containers regularly for leaks
   C. Follow all manufacturer's instructions
   D. All of the above

10) When working with a specific hazardous substance, special training is needed in most cases.

    True False

I have been trained and understand my responsibilities concerning hazard communication

Print Name: _____ Date: _____

Instructor's Signature: _____

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HAZARD COMMUNICATION QUIZ ANSWERS

1) SDS stands for:
   a. Satisfaction Document Standard
   b. Safety Distribution System
   c. Safety Data Sheet

2) The Climate Engineers Inc. SDS book can be found in the field office trailer.

   True False

3) There are several ways exposure to a hazardous substance can occur, they are:
   a. Inhalation & Absorption
   b. Injection & Digestion
   c. All of the above

4) The purpose of labels on hazardous materials, or on products containing them, is to warn about potential danger.

   True False

5) Labels which have been covered up or fallen off must be replaced.

   True False

6) Each Climate Engineers employee has the right to know:
   a. about the hazards they may encounter on the job.
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   c. the hazards of the chemicals contained in unlabeled pipes.
   d. All of the above

7) No additional training is needed for Climate Engineers employees to enter a confined space.

   True **False**

8) Consuming food in the work area can lead to a hazardous material exposure.

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9) Some of the Climate Engineers safety procedures include:
   a. Dispose of all contaminated materials properly
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   c. Follow all manufacturer's instructions
   d. All of the above

10) When working with a specific hazardous substance, special training is needed in most cases.

    True False

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