

Section 6
Brieser
Construction
SH&E
Manual

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The purpose of this plan is to establish a program and procedures for hazardous chemical substances at Brieser Construction. Our Company is firmly committed to providing each of its employees a safe and healthy work environment.

**Hazard
Communication**

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HAZARD COMMUNICATION PROGRAM

Brieser Construction

Purpose

The purpose of this plan is to establish a program and procedures for hazardous chemical substances at *Brieser Construction*. Our Company is firmly committed to providing each of its employees a safe and healthy work environment. It is recognized that various operations may require the use of or exposure to chemicals that have potentially hazardous properties.

This program supports compliance with the Occupational Safety and Health Administration's Hazard Communication Standard, as found in 29 CFR 1910.1200 and 29 CFR 1926.59. This program has been developed and implemented according to applicable standards. It contains a list of hazardous chemicals and describes how to use and maintain material safety data sheets (s) and labels. It will assist in ensuring that containers are labeled and our construction and corporate facility workers are trained on the chemical hazards in the workplace. In addition, we will also provide this information to subcontractors involved in a specific project so that they may provide information and training to their employees.

This program applies to all company employees involved in work operations in which they may be exposed to hazardous substances under normal working conditions or during an emergency situation. Active employee participation in our Hazard Communication Program will result in the continued prevention of chemical-related illnesses and injuries at our company.

This program shall be made available, upon request, to employees, their designated representatives, the Assistant Secretary & the Director in accordance with requirements of 29 CFR 1910.20 (e).

Definitions

Ambient Temperature: The temperature of an environment surrounding a hazardous material.

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

Combustible liquid: Any liquid having a flash point at or above 100°F (37.8°C), but below 200°F (93.3°C).

Common Name: The lay term used to identify a chemical. The common name can be a trade name, brand name, generic name or code name used to identify a chemical.

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

Engineering Controls: Specialized equipment, process and practices that can reduce employee exposure to hazardous materials

Explosive: A chemical that causes a sudden, almost instantaneous release of pressure, gas or heat when subjected to sudden shock, pressure or high temperature.

Exposure: Coming into contact with a hazardous chemical through inhalation, ingestion, skin contact or absorption.

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

- Aerosol, Flammable - a gas that can project a flame over 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of full valve opening
- Gas, Flammable - a gas that becomes flammable when mixed with air
- Liquid, Flammable - any liquid that can be ignited at less than 100° F (37.8° C)

Flash Point: The minimum temperature at which a liquid gives off enough vapors to burn.

Hazard Warning: Any words, pictures or symbols (or combination of them) that appear on a label or other appropriate form of warning which conveys the hazards of the chemical(s) in the container(s).

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

Health Hazard: Immediate or long-term harm to the body, such as an illness or disease, caused by exposure to hazardous materials.

Material Safety Data Sheet (MSDS): Written or printed material from the manufacturer/distributor which has information about the hazardous chemical.

Oxidizer: A chemical other than the blasting agent or explosive that initiates or promotes combustion in other materials, causing fire either of itself or through the release of oxygen or other gases.

Physical Hazard: Negative effects to the employee's physical surroundings as well as the employee's health, caused by exposure to hazardous materials.

Pyrophoric: A chemical that will ignite spontaneously in air at a temperature of 130 F (54.4 C) or below.

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Threshold Limit Value (TLV): The average concentration for a normal eight-hour workday and forty-hour workweek to which an employee may be repeatedly exposed, day after day, without adverse effect.

Toxicity Level: The amount of hazardous material that is necessary to cause harm to the body.

Unstable (Reactive): A chemical which, under conditions of shock, pressure or temperature, will release heat or other energy, resulting in a hazardous condition.

Water Reactive: A chemical that reacts with water to release a gas that is either flammable or presents a health hazard.

Written Hazard Communication Program: The primary requirement of the OSHA Standard, which provides details about:

- The hazardous materials used at the workplace.
- The procedures used to collect and maintains.
- Proper labeling for containers.
- The content and methods for training and informing employees.
- How non-standard work practices will be conducted safely.
- How contractors and other non-employees will be informed of the hazardous materials within the workplace.

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Responsibilities

The Program Administrator – Safety Manager

These people are responsible for:

- Maintaining the training records of all employees included in the training sessions.
- Reviewing and updating this program as necessary.
- Maintaining a master file of the Chemical Inventory List and Material Safety Data Sheets.
- Issuing and administering this program and making sure that the program satisfies the requirements of applicable federal, state or local hazard communication requirements.
- Reviewing the safe use of new chemical products brought into the company.
- Providing initial and annual training of employees on the hazard communication program.
- Conducting random inspections within the corporate facility and at construction sites to insure labels and SDS booklets or portable drives are in place.
- Reviewing and updating label information when necessary and ensuring that labels that fall off or become unreadable are replaced in a timely manner.

The Receiving Department – Equipment Manager

This department is responsible for:

- Reviewing incoming chemical materials to verify correct labeling.
- Holding chemical materials in the receiving area until receipt of the SDS for the product.
- Issuing chemical products and the SDS to requesting departments upon receipt of the SDS.
- Forwarding received SDS to the Program Administrator upon receipt of a hazardous chemical shipment.

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The Job Superintendent/Foreman

This person is responsible for:

- Immediately responding to any employee concerns and requests for information.
- Assessing the risks and providing training to employees on the use and storage of chemicals.
- Making sure that the SDS inventory is consistent and complete.
- Identifying hazardous chemicals used in non-routine tasks, assessing their risks and providing appropriate training to control the risks.
- Review processes on the job site and provide training on hazardous chemicals to assure hazards have been properly addressed in employee training sessions.
- Keeping a file of the written program and the current SDSs in his/her vehicle, in the job site office trailer, or in the job gang box.
- Assure that hazardous chemicals in containers on the job site are properly labeled.

Employees

These people are responsible for:

- Staying alert to the potential hazards of materials in work area
- Consulting Material Safety Data Sheets for the specifics concerning the hazardous chemicals they work with.
- Following the appropriate work practices that have been established by the company.
- Employees will be aware of the client's contingency plan provisions including evacuation routes and alarms. Employees should participate in emergency evacuation drills and practice rescue procedures.

PROGRAM ACTIVITIES

General

- The work environment will be kept clean and safe from recognized health hazards to protect the health and safety of employees.
- Employees will be trained to recognize health hazards, to use appropriate engineering controls when possible, and to wear personal protective equipment.
- Efforts will be made to minimize the amounts of hazardous chemicals in the work place, and to minimize employee exposure to such hazardous chemicals.
- Each employee shall use a portable gas detector as required in all high gas hazard areas.
 - The gas monitor must be calibrated per manufacturer's recommendations and contain a current calibration sticker on the monitor providing the date of calibration.

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- Bump tests are required to be completed at the beginning of each day the monitor is in use, per the requesting client and manufacturer's guidelines, to ensure the monitor is functioning correctly.

Hazard Evaluation Procedures

Brieser Construction is not a chemical manufacturer, importer or distributor. Therefore, the company is not required to assess the hazards or evaluate chemicals. The company will not generate SDSs. However, *Brieser Construction* will always evaluate to the best of our ability the potential health exposure of a particular chemical product before we decide to use it.

The Brieser management will be responsible for the evaluation of new hazardous chemicals that may be used in the workplace. The evaluation will be based upon the information contained within the respective SDS and how the chemical is actually used in the workplace.

Chemical Inventory

The company will rely on the manufacturer's hazard evaluation for all hazardous materials purchased. An alphabetized chemical inventory of all hazardous chemicals used by *Brieser Construction* will be made and maintained by the Program Administrators. The master Chemical Inventory List is located online at MSDSONline.com. Any employee may access this list either through the internet or locally stored on portable hard drives which are issued every year to all Brieser foremen. The portable hard drives contain a link to the online feature as well as a local storage of all SDS's (being connected to the internet is not necessary).

The online site can be accessed by typing or clicking (if viewing this document on a computer) <https://MSDSmanagement.MSDSONline.com/?ID=D7023236-C39E-4090-AA63-1E7AF7B461>

It is the responsibility of the receiving department to forward an SDS received with a shipment of hazardous chemicals to the Brieser Program Administrator. The Program Administrator will then reference the current chemical inventory to maintain and update the most current SDS, and to file the outdate ones. Each chemical on the list will have the most current SDS on file.

SDS Sheets

The SDS we use are fact sheets for chemicals which may pose a physical or health hazard in the workplace. SDSs provide our employees with specific information on the chemicals they use. A SDS containing the information required by the Hazard Communication Standard will be kept for each substance listed on the "Chemical Inventory". The SDS will be the most current one supplied by the chemical manufacturer, importer, or distributor.

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The Program Administrator is responsible for obtaining/maintaining the SDSs at our facility. He must clear all new procurements for the company. Anyone ordering a new product will first obtain a copy of the SDS from the supplier for review.

- The SDS will be reviewed by the Program Administrator.
- If the product is approved for purchase, the original copy of the SDS will be added to database located at MSDSONline.com
- A copy of the SDS for the new product will be sent to the Job Superintendent/Foreman where the new chemical is to be used. It will then be the responsibility of the Job Superintendent/Foreman to assure that the SDS is included in the SDS book or their issued portable hard drive that they maintain.
- An SDS supplier request form letter will be sent out by the Program Administrator to obtain a SDS for new products if one is not received with the shipment. We will request that the SDS be sent within 10 days.
 - A copy of the request will be kept in an active file until the SDS has been received.
 - If the SDS is not received in the required time, a second supplier request for letter (see sample letter in this program) will be sent requesting the SDS within 10 days.
 - If, after two requests for an SDS, the supplier still does not send the information, a letter of complaint will be sent to the Department of Labor.
 - Copies of correspondence will be kept on file by the Program Administrator.

In addition, it is a condition of purchase that a hazardous chemical shipped directly from the manufacturer/supplier to the job site will be accompanied by appropriate SDSs. The standard requires the manufacturer or importer to determine if a material is covered under the standard. If there is a determination that a product is not covered, the purchase order will require a statement to that effect, and the statement will be available in the same manner that the SDSs are furnished.

The Safety Data Sheets are kept at the following locations:

- Office of the Program Administrator (Master Copy)
- Job Superintendent/Foreman vehicle, job site trailer, and gang box
- Receiving Department

For SDSs that are not on the job site for whatever reason, a fax machine can be used, if available, to obtain a copy from the manufacturer, supplier, importer, or corporate office.

The Job Superintendent/Foreman will keep a file of the written program and the current SDSs in the Job Superintendent/Foreman vehicle, job site office trailer, or the job gang box. The program and SDSs will always be on-site and attached to the TSTI in order to be immediately accessible to

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all employees on all work shifts. Each Job Superintendent/Foreman will review processes on the job site to assure hazards have been properly addressed in employee sessions.

All employees working with chemicals can view copies of Material Safety Data Sheets for chemicals to which they are exposed on the site or at the corporate facility. Employees may request to have a copy of an SDS by contacting the Brieser office. The Program Administrator will respond to the request within five working days and notify the employee or designated representative of the status of the request.

Labeling of Chemical Containers

At a minimum, labels should list the chemical identity and appropriate hazard warnings. The chemical identity is found on the label, the SDS, and the chemical inventory. Therefore, the chemical identity links these three sources of information. The chemical identity used by the supplier may be a common or trade name, or a chemical name. The hazard warning is a brief statement of the hazardous effects of the chemical (i.e., "flammable," or "causes lung damage"). Labels frequently contain other information, such as precautionary measures (i.e., "do not use near open flame"), but this information is provided voluntarily by our company and is not required by the rule. Our labels are legible and prominently displayed though their sizes and colors can vary.

In addition to the manufacturer's labels, the Hazardous Material Identification System (HMIS® III) and/or the National Fire Protection Association (NFPA) 704 System can be used on containers to describe health, fire, and reactivity hazards and the proper personal protection equipment (PPE) to be worn in normal handling of the chemical.

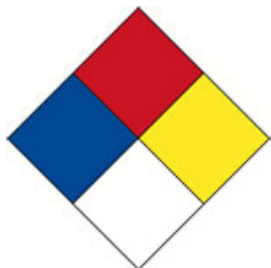
HMIS® is intended to be used by employers and workers on a daily basis and provides information on acute and chronic health hazards, flammability, physical hazard, and personal protective equipment. The system is preferred by Brieser Construction because the emphasis of *HMIS®* on personal protective equipment and hazard communication make it the better choice for keeping employees informed about every day workplace hazards and how they can minimize exposure.

NFPA® label information is intended for use by emergency response personnel (fire fighters, hazardous materials workers, police, etc.) under emergency conditions. Labels contain information on acute health hazards, flammability, physical hazard and special characteristics that might require special fire fighting techniques, such as reactivity with water. This labeling system shall also be familiar to Brieser Construction personnel due to the ubiquitous nature of this system.

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NFPA Color Code Warning System

There are many different color-code warning systems, but the most common is the National Fire Protection Association (NFPA) system. The NFPA system uses a diamond-shaped system warning symbol which has four color-code sections.



The top (red diamond) is the Flammability Hazard rating. The left (blue diamond) is the Health Hazard. The right (yellow diamond) is the Reactivity Hazard. And the bottom (white diamond) contains special symbols to indicate the properties and categories not explained by the other sections.

A number-based rating system is used within each section, ranging from 0- least dangerous to 4- extremely dangerous.

Health Hazard - Blue Diamond

Class Definition

0. Materials which do not present a health hazard.
1. Material which on exposure would cause irritation, but only minor residual injury even if no treatment was given.
2. Material which on intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical treatment is given.
3. Materials which on short exposure could cause serious temporary or residual injury even though prompt medical treatment was given.
4. Materials which on very short exposure could cause death or major residual injury even though prompt medical treatment was given.

Flammability Hazard - Red Diamond

Class Definition

0. Materials that will not burn.
1. Materials that must be preheated to high temperatures before ignition can occur.
2. Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
3. Liquids and solids that can be ignited under almost all ambient temperature conditions.
4. Materials which will burn readily, rapidly or completely vaporize at atmospheric pressure and normal ambient temperature.

Reactivity Hazard - Yellow Diamond

Class Definition

0. Materials which, in themselves, are normally stable and which are not reactive with water.

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1. Materials that in themselves are normally stable, but which can become unstable at elevated temperatures and pressure.
2. Materials which, in themselves, are normally stable, but which can become unstable at high temperatures and pressures and may react with water with some release of energy, but not violently.
3. Materials which, in themselves, are capable of detonation or explosive reaction, but require a strong initiating source or which must be heated under confinement before initiation or which react explosively with water.
4. Materials which, in themselves, are readily capable of explosive detonation or of explosive decomposition or reaction at normal temperatures and pressures.

Other Hazard - White Diamond

<i>W</i>	Use no water
<i>Acid</i>	Acids
<i>Base</i>	Alkalis, cyanides, Neutral salts
<i>Oxy</i>	Oxidizing agents
<i>Flam</i>	Flammable materials - Flammable Classes 2, 3, & 4
<i>Rad</i>	Radioactive
<i>Pyro</i>	Pyrophoric Gasses

HMIS® III System

The National Paint and Coatings Association (NPCA) developed the Hazardous Materials Identification System (HMIS®) in order to provide employers with a tool designed to aid employers in the development and implementation of a comprehensive Hazard Communication

Program. HMIS® involves:


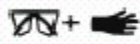





















- Hazard assessment;
- Labeling;
- Safety Data Sheets (SDS); and
- Employee training.



HMIS® communicates hazard information through training and the use of colors, numbers, letters of the alphabet, and symbols that include pictograms of types of personnel protective equipment (PPE) and icons for Target Organs and Physical Hazards. The program is based on a hazard rating scheme designed to be compatible with hazard communication systems

of such organizations as American National Standards Institute (ANSI), National Institute of Occupational Safety and Health (NIOSH), U.S. Environmental Protection Agency (U.S. EPA), and National Fire Protection Association (NFPA®) that are found in workplaces across the nation.

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HAZARDOUS MATERIALS IDENTIFICATION SYSTEM			
HAZARD INDEX		PERSONAL PROTECTION INDEX	
4 = SEVERE HAZARD	An asterisk(*) or other designation corresponds to additional information on a data sheet or separate chronic effects notification	A	
3 = SERIOUS HAZARD		B	
2 = MODERATE HAZARD		C	
1 = SLIGHT HAZARD		D	
0 = MINIMAL HAZARD	Additional Information	E	
PERSONAL PROTECTION EQUIPMENT		F	
A		G	
n		H	
o		I	
p		J	
q		K	
r		X	Consult your supervisor or S.O.P. for "SPECIAL" handling directions
s			
t			
u			
w			
y			
z			

No hazardous chemicals will be accepted for use at our company unless labeled. Original chemical product containers or packaging containing hazardous chemicals will be labeled with the following information.

- ◆ Trade name or chemical name of the hazardous substance
- ◆ Name and address of the chemical product manufacturer
- ◆ Appropriate hazard warning in the form of words, pictures or symbols that convey the hazard of the substance in the container
- ◆ Target organs affected by the chemical

The Program Administrator and all Job Superintendent/Foreman are responsible for ensuring that all hazardous chemicals in containers are properly labeled. The Program Administrator and the Job Superintendent/Foreman also ensure that newly purchased materials are checked for labels prior to use.

The receiving/shipping department and the site Job Superintendent/Foreman are responsible for ensuring the proper labeling of any shipped containers.

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The Program Administrator, Job Superintendent/Foreman, and the Receiving/Shipping Department will refer to the corresponding SDS to assist employees in verifying label information.

Brieser Construction employees shall not remove or deface existing labels. If an employee notices an unmarked container or defaced label, they shall report it to their Job Superintendent/Foreman or the Program Administrator, who will then label the container with the proper information.

Labels and other forms of warnings shall be legible and in English. If an employee does not understand English, the required information shall also be provided on the container in the native language of the non-English speaking employee if possible. It is the Job Superintendent/Foreman responsibility to ensure that compliance with this requirement is met.

Labels on Portable Containers

If a chemical is transferred from a labeled container to a portable container that is intended only for their IMMEDIATE use by the employee who is going to make the transfer, no labels are required on the portable container. However, if the employee leaves the container unattended, or if the portable container still contains a hazardous chemical in it at the end of the work shift, the HMIS or NFPA labeling system and product identification must be placed on the container.

Contractors

Contractors, vendors, and service personnel who have employees assigned to work on the job site or at the corporate facility in areas where accidental exposures to hazardous chemicals may exist must be informed of chemical hazards. In addition, the SDS sheet should be attached to their TSTI or equivalent form.

All contractor employees are also to disclose any hazardous substances they will bring onto any Brieser Construction work site. If any are brought onto the site, the contractor is to supply the proper labels and SDS information as required by the Hazard Communication Standard.

Hazards of Non-Routine Tasks

When employees are required to perform non-routine tasks or a new task that may have the potential to expose workers to hazardous chemicals, the employees will be informed of these hazards by the Site Job Superintendent/Foreman.

Hazards of Unlabeled Pipes

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We will inform employees of the hazards of chemicals contained in unlabeled pipes in their work areas. It will be the client's responsibility to inform *Brieser Construction* if such labeled pipes are located on a job site.

Training

Everyone who works with or is potentially exposed to hazardous chemicals will receive initial training and annual refresher training pertaining to the safe use of those hazardous chemicals. Exposure means that "an employee is subjected to a hazardous chemical in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.) and includes potential (e.g., accidental or possible) exposure." Whenever a new hazard is introduced or old hazard changes, additional training will be provided.

When a Brieser employee is working at a customer's site. The site-specific plan shall be used to train on site specific gas hazards that are part of plant processes. A Gas Hazard awareness training shall be a part of the sites specific safety plan and administered to employees before initial assignment and annually thereafter.

- Gas Hazard Awareness training shall be documented and available for review. Gas Hazard Awareness Training is part of the Brieser Site Specific Safety Plan for the site Brieser is currently under contract. The title of the training shall be called: Brieser Site Specific Safety Plan for [Insert Your Sites Name]
- Gas Hazard Awareness training shall be documented and available for review and include at a minimum:
 - a) Locations of alarm stations
 - b) Gas Monitoring Equipment- portable and Fixed Detection
 - c) Gas Alarms
 - d) Gas Hazards- Characteristics of gases, to include oxygen deficiency, oxygen or nitrogen enrichment, carbon monoxide and hydrogen sulfide at a minimum. Hazard training must also include any plant or department specific gases of concern. Training must include signs and symptoms of overexposure
 - e) Personnel Rescue Procedures
 - f) Use and care of PPE such as Self-Contained Breathing Apparatus (SCBA)- includes donning and emergency procedures (if applicable)
 - g) Evacuation Procedures
 - h) Staging Areas – Primary and Secondary

Information and training is a critical part of the Hazard Communication Program. We will train our employees to read and understand the information on labels and SDSs, to determine how the information can be obtained and used in their own work areas, and to understand the risks of exposure to the chemicals in their work areas as well as control measures to protect themselves. Input from employees is encouraged regarding the training they have received, and their

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suggestions for improving it. In this way, we hope to reduce any incidence of chemical source illnesses and injuries.

Office employees who are not expected to work with or around chemicals will be provided awareness training. Those employees who handle or work around hazardous chemicals will receive more in-depth training.

Training Content

Training content is organized according to the types of hazards Brieser employees typically encounter in the workplace, as non-routine hazards arise, Brieser Superintendents/Project Managers will assess and train as needed. Brieser specifically trains on the following hazards; Silica, Hydrocarbons; Benzene, Xylene, Hydrogen Sulfide or Toluene and Welding fumes. All training will be performed prior to performing work at Brieser using this policy as an aid. Prior to performing work means that training will be given by the crew leader utilizing the corresponding SDS before each days task This method ensures that the potentially exposed employee will receive both initial and periodic refresher training for the hazard they may encounter at the jobsite. The format of the training program used may include audio/visual aids, classroom lecture and discussion, and demonstrations. Training will emphasize the following elements:

- Summary of OSHA 29 CFR 1910.1200 & 29 CFR 1926.59 and *Brieser Construction's* written program.
- The names of the hazardous chemicals used in the work area, the characteristics such as appearance or odor of hazardous chemicals or gases when released in the work area, the physical hazards and health effects of chemicals, and the measures employees can take to protect themselves such as selecting the appropriate Personal Protective Equipment, Engineering & Administrative controls
- How to use the company's labeling system and who to contact for additional information.
- Where SDSs are kept and how to use the portable hard drives.
- Work practices and engineering control procedures to minimize exposures.
 - Engineering controls such as ventilation or wet methods must be used to control silica-containing dusts.
- How to use, maintain and properly select and inspect PPE such as; gloves, coveralls, respirators and eye protection.
 - Personal protective equipment such as gloves, coveralls and eye protection should be used to control silica exposures.
- Monitoring equipment needed at host facilities such as H2S personal monitors and portable atmospheric 4 gas type direct read instruments needed in high gas hazardous areas
- New employees that will be exposed to hazardous chemicals will be trained prior to using them. In addition, if a new chemical is introduced, each affected employee will be given

BRIESER CONSTRUCTION GENERAL CONTRACTORS		DATE:	PROCEDURE:
		11-10-17	TBD
CORPORATE SAFETY, HEALTH & ENVIRONMENTAL MANUAL		Revision:	PAGE:
		08	16
STANDARD OPERATING PROCEDURE:		Hazard Communication	
CROSS REFERENCE:	29 CFR 1926.59 Hazard Communication; 29 CFR 1910.1200 Hazard Communication		

appropriate training and information regarding the chemical. Annual follow-up training will be given to all other employees covered under this standard.

- Records of training will be kept on file with the Program Administrator and will include the date of the session, the type of session, and a list of the topics covered.

Attachments

- Chemical Inventory Sheet
- Hazardous Material Review
- Safety Data Sheet
- Sample SDS Letter
- Hazard Communication Training Record
- Hazard Communication Learning Exercise and Answer Sheet
- Hazard Communication SDS Learning Exercise and Answer Sheet

Hazardous Material Review

Company _____ Location _____ Department _____
 Work Area _____ Date Completed _____ Completed By _____

This form provides a review of labeling and safe use of hazardous chemicals.

- Conduct this review in each work area.
- List all chemicals used in the work area.
- Inspect all container labels for name, manufacturer/distributor, appropriate hazard warning and target organ.
- State specific action taken to correct deficiencies.

Chemical Name	Trade Name	Use of Material	Adequate Safety Procedures		Quantity Used Per Month	Safe Storage		Properly Labeled		Corrective Action Taken
			Yes	No		Yes	No	Yes	No	
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										

SAFETY DATA SHEET

IDENTITY (As Used on Label and List)	Note: <i>Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.</i>
--------------------------------------	--

Section I

Manufacturer's Name	Emergency Telephone Number
Address (Number, Street, City, State, and Zip Code)	Telephone Number for Information
	Date Prepared
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/identity information

Hazardous Components Specific Chemical Identity: Common Names(s)	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)

Section III — Physical/Chemical Characteristics

Boiling Point		Specific Gravity (H ₂ O = 1)	
Vapor Pressure (mm Hg.)		Melting Point	
Vapor Density (AIR = 1)		Evaporation Rate	
Solubility in Water			
Appearance and Odor			

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Extinguishing Modes			
Special Fire Fighting Procedures			
Unusual Fire and Explosion Hazards			

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable		
Incompatibility (Materials to Avoid)			
Hazardous Decomposition or Byproducts			
Hazardous Polymerization	May Occur		Conditions to Avoid

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? Skin? Ingestion?

Health Hazards (Acute and Chronic)

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

Signs and Symptoms of Exposure

Medical Conditions
Generally Aggravated by Exposure

Emergency and First Aid Procedures

Section VII — Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Waste Disposal Method

Precautions to be Taken in Handling and Storing

Other Precautions

Section VIII — Control Measures

Respiratory Protection (Specify Type)

Ventilation	Local Exhaust	Special
	Mechanical (General)	Other

Protective Gloves Eye Protection

Other Protective Clothing or Equipment

Work/Hygienic Practices

SDS Request Letter

Date:

To: (Chemical Manufacturer, Importer or Distributor)

As you are aware, OSHA requires employers to provide training to their employees concerning the hazards of chemicals of other hazardous materials.

To properly train our employees, we need a Safety Data Sheet (SDS) for the following product(s):

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Your prompt attention is necessary to maintain a proper level of safety for our employees.
Please send the SDS(s) to:

Company Name: Brieser Construction
Attention: HCS Program Administrator
Address: 24101 S. Municipal Drive
City, State, Zip Code: Channahon, IL 60410

Sincerely,

Program Administrator

**BRIESER CONSTRUCTION
SAFETY & HEALTH MANUAL
SECTION 6
HAZARD COMMUNICATION
SUB-SECTION
TRAINING**

EMPLOYEE TRAINING CERTIFICATION & ACKNOWLEDGMENT

Brieser Construction

Date: _____ Location: _____

Name (Print): _____

Trainer's Name and Title: _____

Trainer Qualifications: _____

Length of Training: _____ Hours/Minutes Time: _____ AM/PM TO: _____ AM/PM

Purpose of Training (check one):

_____ Hazard Communication-New Physical or Health Hazard _____ Portable Hard Drives (MSDSonline.com)

TITLE: HAZARD COMMUNICATION

Note: Please consult Section 6 Hazard Communication in Brieser Safety Manual& the SDS for training content.

- Explanation of the OSHA Standard 29 CFR 1910.1200
- Key definitions & abbreviations
- Hazard Identification
- Health Hazards: Taken from the SDS you are working with: Example; Exposure to silica has been shown to cause silicosis, lung cancer, pulmonary tuberculosis and other airway diseases.
- Physical Hazards: Combustible liquid, Compressed gas, explosive, flammable, organic peroxide, oxidizer, pyrophoric, unstable—reactive, water-reactive
- Safety Data Sheets
- Trade Secret
- Labels & Labeling
- Employee Information & Training
- Hazardous Substances, Harmful Physical Agents, or Infectious Agents
- Brieser Construction Written Hazard Communication Employee Right-To-Know Program discussed

ROUTING	PERSONEL MANAGER	Add to Training Database
	SCAN	SAFETY/HCS/(PURPOSE OF TRAINING)/MMDDYY TRAINING CERTIFICATION

Signature of Instructor _____ Employee Signature _____

Please Note: If more than one employee is being trained use Attendance Roster pg. 22 Sect. 6 Hazard Communication

ATTENDANCE ROSTER
Brieser Construction

EMPLOYEE NAME (Print or Type)	EMPLOYEE SIGNATURE	TRADE	JOB TITLE
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			
26.			
27.			
28.			
29.			
30.			

Hazard Communication Learning Exercise Brieser Construction

Score: _____ %

Employees Name: _____	Date: _____
Company: _____	Instructor: _____
_____	Job Title: _____

Answer the following questions by circling the correct letter.

- 1. The temperature at which a flammable gives off enough vapor to burn is called:**
 - a. the ignition temperature.
 - b. the flash point.
 - c. the combustion point.

- 2. Hazardous materials can be found as:**
 - a. solids.
 - b. liquids.
 - c. gasses.
 - d. all of the above.

- 3. When you are working in an area with either a lack of oxygen to breathe or high levels of toxic materials in the air, which type of respirator may be required?**
 - a. air supplied.
 - b. air purifying.
 - c. none of the above.

- 4. If you are told that your exposure to a material requires you to wash your hands before eating or smoking, the primary route of entry into your body for that material is probably through:**
 - a. inhalation.
 - b. absorption.
 - c. ingestion.
 - d. hearing.

Answer each of the following questions by listing the correct answer.

- 5. When working with corrosives, what personal protective equipment should be worn?**

- 6. What are three common methods for controlling or reducing the exposure to a toxic material?**

- 7. List at least two sources of information about hazardous materials in the workplace**

Hazard Communication Learning Exercise
Brieser Construction
Answer Sheet

Answer the following questions by circling the correct letter.

- 1. The temperature at which a flammable gives off enough vapor to burn is called:**
 - a. the ignition temperature.
 - b. the flash point.***
 - c. the combustion point.

- 2. Hazardous materials can be found as:**
 - a. solids.
 - b. liquids.
 - c. gasses.
 - d. all of the above.***

- 3. When you are working in an area with either a lack of oxygen to breathe or high levels of toxic materials in the air, which type of respirator may be required?**
 - a. air supplied.***
 - b. air purifying.
 - c. none of the above.

- 4. If you are told that your exposure to a material requires you to wash your hands before eating or smoking, the primary route of entry into your body for that material is probably through:**
 - a. inhalation.
 - b. absorption.
 - c. ingestion.***
 - d. hearing.

Answer each of the following questions by listing the correct answer..

- 5. When working with corrosives, what personal protective equipment should be worn?**
Gloves, Goggles, Gown, Boots, Faceshield

- 6. What are three common methods for controlling or reducing the exposure to a toxic material?**
Ventilation, Personal Protective Equipment, Substitute with a less hazardous material.

- 7. List at least two sources of information about hazardous materials in the workplace**
Container Label, SDS

Hazard Communication SDS Exercise Brieser Construction

Score: _____ %

Employees Name: _____	Date: _____
Company: _____	Instructor: _____
Social Security No.: _____	Job Title: _____

Answer the following questions by looking up the SDS the chemical named on page 21.

1. What is the name of this material?

2. Who is the manufacturer?

3. If this material is flammable or combustible, what is the material's flash point?

4. If this material is a potential health hazard, what is the TLV (in ppm or mg/m³)
 - T F 5. This is a reactive material.
 - T F 6. Gloves and or eye protection are suggested when exposed to this material.
 - T F 7. Use this material in well-ventilated areas, away from sparks or flames.
 - T F 8. This material evaporates quickly, so don't worry about cleaning it up.
 - T F 9. There is never a need to wear a respirator when exposed to high concentrations of this material.

10. What are the possible health effects from overexposure to this material?

11. What are the First Aid procedures when using this material?

12. What are the steps to be followed in case of a spill or accidental release of this material into the atmosphere?

13. What precautions must be taken when using this material during normal operations?

Hazard Communication SDS Exercise
Brieser Construction
Answer Sheet

Answer the following questions by circling the correct letter.

1. What is the name of this material?

See SDS Section I

2. Who is the manufacturer?

See SDS Section I

3. If this material is flammable or combustible, what is the material's flash point?

See SDS Section IV

4. If this material is a potential health hazard, what is the TLV (in ppm or mg/m³)

See SDS Section II

T F 5. This is a reactive material.

See SDS Section V

T F 6. Gloves and or eye protection are suggested when exposed to this material.

See SDS Section VIII

T F 7. Use this material in well-ventilated areas, away from sparks or flames.

See SDS Section VII

T F 8. This material evaporates quickly, so don't worry about cleaning it up.

See SDS Section VII

T F 9. There is never a need to wear a respirator when exposed to high concentrations of this material.

See SDS Section VIII

10. What are the possible health effects from overexposure to this material?

See SDS Section VI

11. What are the First Aid procedures when using this material?

See SDS Section VI

12. What are the steps to be followed in case of a spill or accidental release of this material into the atmosphere?

See SDS Section VII

13. What precautions must be taken when using this material during normal operations?

See SDS Section VI