
GHS HAZCOM PROGRAM

Purpose

The purpose of this program is to ensure that the hazards of all chemicals and substances are evaluated and the information concerning their hazards is communicated to employees, including emergency response organizations, state and federal agencies, other employers and contractors, as necessary. This hazard information will be communicated, and displayed in accordance with the new **Global Harmonized System of Classification and Labeling of Chemicals**.

Brunel is firmly committed to providing each of its employees a safe and healthy work environment. It is recognized that workers may use chemicals or substances that have potentially hazardous properties. When using these substances, workers must be aware of the identity, toxicity or hazardous properties of a chemical or substance, since an informed employee is more likely to be a safe employee. To this end, Brunel has established a written GHS Hazard Communication Program which standardizes the format for all SDSs.

Scope

This program is applicable to all Brunel employees who may be exposed to hazardous chemicals. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers Brunel employees and contractors and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

Definitions

Chemical - any element, chemical compound, or mixture of elements and/or compounds.

Chemical Inventory List - a list of chemicals used at this facility, or by personnel that report to this facility.

Electronic Access – using electronic media (telephone, fax, internet, etc.) to obtain Safety Data Sheets or health information.

Facility - an establishment at one geographical location containing one or more work areas.

Hazardous chemical - any chemical that is a physical hazard, a health hazard, or has a Permissible Exposure Limit established for it.

Hazardous substance - see hazardous chemical.

Hazard Communication Program Coordinator - the person who has overall responsibility at a facility for that facility's Hazard Communication Program.

Health hazard - a substance for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic adverse health effects may occur in exposed employees.

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IDLH - immediately dangerous to life and health.

Immediate Use - the 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.

Jobsite - an area remote from a Brunel facility where hazardous chemicals are stored or used and employees are present for the purpose of Brunel business.

(SDS) Safety Data Sheet - a written or printed document containing chemical hazard and safe handling information, prepared in accordance with the OSHA Occupational Safety & Health Standards, Section 1910.1200, paragraph (g).

(NFPA) National Fire Protection Association Labeling - a common industry labeling method developed by the National Fire Protection Association to identify the hazards associated with a particular chemical.

(PEL) Permissible Exposure Limit - the maximum eight-hour time weighted average of any airborne contaminant to which an employee may be exposed.

Readily available - when an employee has access during the course of his/her normal work shift.

Substance - see Chemical.

(TLV) Threshold Limit Value - the airborne concentration of a substance that represents conditions under which it is believed that nearly all normal workers may be repeatedly exposed day after day without adverse effect.

Work area - a room or defined space in a facility where hazardous chemicals are stored or used and where one or more employees are present.

Workplace - see Facility.

Workplace Chemical List - see Facility Chemical List.

Responsibilities

A written hazard communication program shall be developed, implemented and maintained at each Brunel workplace that describes how labels and other forms of warning, safety data sheets and employee information will be met.

The Safety Manager is responsible for developing and implementing the Hazard Communications Program. Managers are responsible for maintaining Safety Data Sheets and the Chemical Inventory List for their locations. The Safety Manager reviews the SDS files and Chemical Inventory List at each location at least annually to ensure that they are complete and up to date.

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Employees are responsible for following the requirements in the Hazard Communication Program, to use proper personal protective equipment, to report containers without labels immediately and to not deface any label.

Any employee who transfers any material from one container to another is responsible for labeling the new container with all required information.

All employees are responsible for learning the requirements of this section and for applying them to their daily work routine.

Requirements

Introduction

This Hazard Communication Program was prepared for use by Brunel to explain how Brunel meets the requirements of the federal Occupational Safety and Health Administration's Hazard Communication Standard (29 CFR 1910.1200). It spells out how Brunel will inventory chemicals stored and used, obtain and use safety data sheets, maintain labels on chemical substances, and train employees about the hazards of chemicals they are likely to encounter on the job.

Preparation of this program indicates our continuing commitment to safety among our employees in all of our locations.

- Each facility is expected to follow this program and maintain its work areas in accordance with these requirements.
- Employees, their designated representatives, and government officials must be provided copies of this program upon request.
- In addition to the program, other information required as part of our hazard communication effort is available to workers upon request.
- Asking to see this information is an employee's right.
- Using this information is part of our shared commitment to a safe, healthy workplace.

List of Hazardous Chemicals

Brunel maintains a listing of all known hazardous chemicals known to be present or used at each job site by using the identity that is referenced on the appropriate safety data sheet (SDS). This identity is often a common name, such as the product or trade name (i.e., Lime-A-Way).

The Chemical Inventory List is updated as necessary and at least annually by the Hazard Communication Program Coordinator or their designee.

The facility Chemical Inventory List must be available for review upon request.

Safety Data Sheets

Chemical manufacturers are responsible for developing SDSs. Brunel shall have a SDS for each chemical used with the exception of consumer products. SDSs must be obtained for each required chemical from the chemical manufacturer, supplier or vendor. The purchasing of any potentially

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hazardous chemical products from any supplier that does not provide an appropriate Safety Data Sheets in a timely fashion is prohibited.

SDSs shall be maintained and readily accessible in each work area. SDSs can be maintained at the primary work site. However, they should be available in case of an emergency. SDSs must be made available, upon request, to employees, their designated representatives, the Assistant Secretary of Labor and the Director of OSHA.

Safety Data Sheets are filed alphabetically, by material classification, in the SDS Book. A Chemical Inventory List is provided in the front of the SDS Book, listing all SDS' contained therein. This inventory serves as the index of the SDS Book. The SDS Book shall be displayed in a prominent location in the work area where it is accessible to all employees.

A copy of a SDS request form is located in the first section of the SDS Book. An employee may use a copy of this form to request an SDS or he may ask the Manager for one. In either case the requested SDS must be given to the employee within 24 hours.

The Safety Data Sheet must be kept in the SDS library for as long as the chemical is used by the facility.

Electronic access (telephone, fax, internet, etc.) may be used to acquire and maintain SDS libraries and archives.

The Manager is responsible for seeing that the Chemical Inventory List inventory is maintained, is current and is complete. He will review the inventory and the SDS Book at least annually. When a hazardous material has been permanently removed from the work place, its SDS is to be removed from the SDS Book and the Chemical Inventory List. A file copy is to be maintained in a "dead file". The Brunel must replace old SDSs with updated sheets when they are received.

SDS' for hazardous materials to which Brunel employees have been exposed must be maintained after the employee leaves the employment of Brunel.

Before any non-routine task is performed, employees will be advised of methods and special precautions, PPE and the hazards associated with chemicals and the hazards associated with chemicals contained in unlabeled pipes in their work areas. In the unlikely event that such tasks are required, the Manager will provide SDS for involved chemical.

Employees have the right to request SDS on any chemical and it must be provided without any issues.

Labels, Labeling and Warnings:

The Manager will ensure that all hazardous chemicals used or stored in the facility are properly labeled.

- Damaged labels or labels with incomplete information shall be reported immediately.
- Damaged labels on incoming containers of chemicals shall not be removed.
- New labels shall be provided as needed so that all containers are properly labeled.
- Only containers into which an employee transfers a chemical for their own immediate use will not require labeling.
- Employees who are unsure of the contents of any container, vessel or piping must contact their supervisor for information regarding the substance including:
 - The name of the substance
 - The hazards related to the substance
 - The safety precautions required for working with the substance.

Labels, tags or markings on containers shall list as a minimum:

The HCS requires chemical manufacturers, importers, or distributors to ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged or marked with the following information:

- name, address and telephone number of the chemical manufacturer, importer, or other responsible party
- product identifier
- signal words to indicate the relative level of severity of hazard;
- hazard statement(s);
- precautionary statement(s);
- pictogram(s);
- supplemental information may be provided.
- Labels must be legible, in English, and prominently displayed. Other languages shall be displayed in addition to English.
- Brunel or employees shall not remove or deface labels on incoming containers of hazardous chemicals.

All containers must be labeled. When an employee transfers the contents of one container to another, he must label the new container with all required information. This information can be obtained from the labeling of the original container or from the material's SDS. Any container of a potentially hazardous material that will not be emptied during one shift must be labeled, without exception.

Personnel in the Shipping and Receiving Departments are responsible for proper labeling of all containers shipped by Brunel and for the inspection of all incoming materials to ensure correct labeling. Chemicals received from vendors that are not properly labeled must be rejected.

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NFPA Standard 704 labels shall be the preferred hazard identification method used in Brunel facilities and on materials containers used on client sites. All employees, clients, subcontractors and visitors who may come in contact with a Brunel hazardous substance must be briefed to ensure understanding of the NFPA 704 labeling system.

Training

Employees shall be provided with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, 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 (e.g., flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and Safety Data Sheets.

Additional training will be provided whenever a new chemical hazard is introduced into the work area. To reinforce the importance of handling chemicals properly when performing new or non-routine tasks supervisors will conduct supplementary training as needed.

Formal training will be conducted by facility employees or individuals who are knowledgeable in the Hazard Communication program.

The Manager shall ensure records of employee training are maintained.

When an outside contractor, such as a pest control worker or a carpenter enters a Brunel site to perform a service for the Brunel, he must first present SDS' for any and all hazardous chemicals he will use. These SDS' will be treated as above with the same training requirements. The Manager will be responsible for contacting each contractor before work is started to gather and disseminate any information concerning chemical hazards the contractor is bringing into the work place.

The Hazard Communication Program documented training shall, as a minimum, include:

- Requirements, details and rights of the employee as contained in the Hazard Communication regulation
- Operations and work areas where hazardous chemicals are present.
- Location of the written Hazard Communication Program, SDSs and the Chemical Inventory List.
- How to access SDS' or SDS information.
- How to read and an explanation of labels and Safety Data Sheets for pertinent hazard information and how employees can obtain and use the appropriate hazard information.
- Methods and observations that may be used to detect the presence or release of hazardous chemicals by use of monitoring devices, visual appearance or odor.
- The physical & health hazards of chemicals in the work area.
- Protection measures to be utilized to prevent exposure.
- Appropriate work practices.
- Emergency procedures.
- Proper PPE to be used.

Multi-Employer Job Sites/Multi-Work Site

Multi-Work Sites

Where employees must travel between work places during a work shift, the written HAZCOM Program shall be kept at a primary job site. If there is no primary job site, then the program shall be sent with employees.

The program shall be made available, upon request, to employees, their designated representatives, the Assistant Secretary and the Director in accordance with requirements of 29 CFR 1910.1020(e).

Multi-Employer Job Sites

A pre-job briefing shall be conducted with the contractor prior to the initiation of work on the site.

- During this pre-job briefing, contractors shall notify Brunel and present current copies of Safety Data Sheets and label information for every hazardous substance brought on-site.
- Brunel shall notify and provide required SDS and label information for all hazardous materials the contractor may encounter on the job.
- The facilities labeling system and any precautionary measures to be taken by contractor during normal conditions and emergencies shall be addressed.
- By providing such information to other employers, Brunel does not assume any obligations that other employers have for the safety of their employees.
- In this regard, other employers working on Brunel property or for Brunel on client's property remain fully responsible for developing and implementing their own compliant hazard communication programs.

Hazard Warnings / NFPA 704

The NFPA 704 Diamond is a means of disseminating hazard warning and information for a material. The diamond is divided into four sections. Each of the first three colored sections has a number in it associated with a particular hazard. The higher the number is, the more hazardous a material is for that characteristic. The fourth section includes special hazard information. The four sections and an explanation of the numbers in them are provided below:


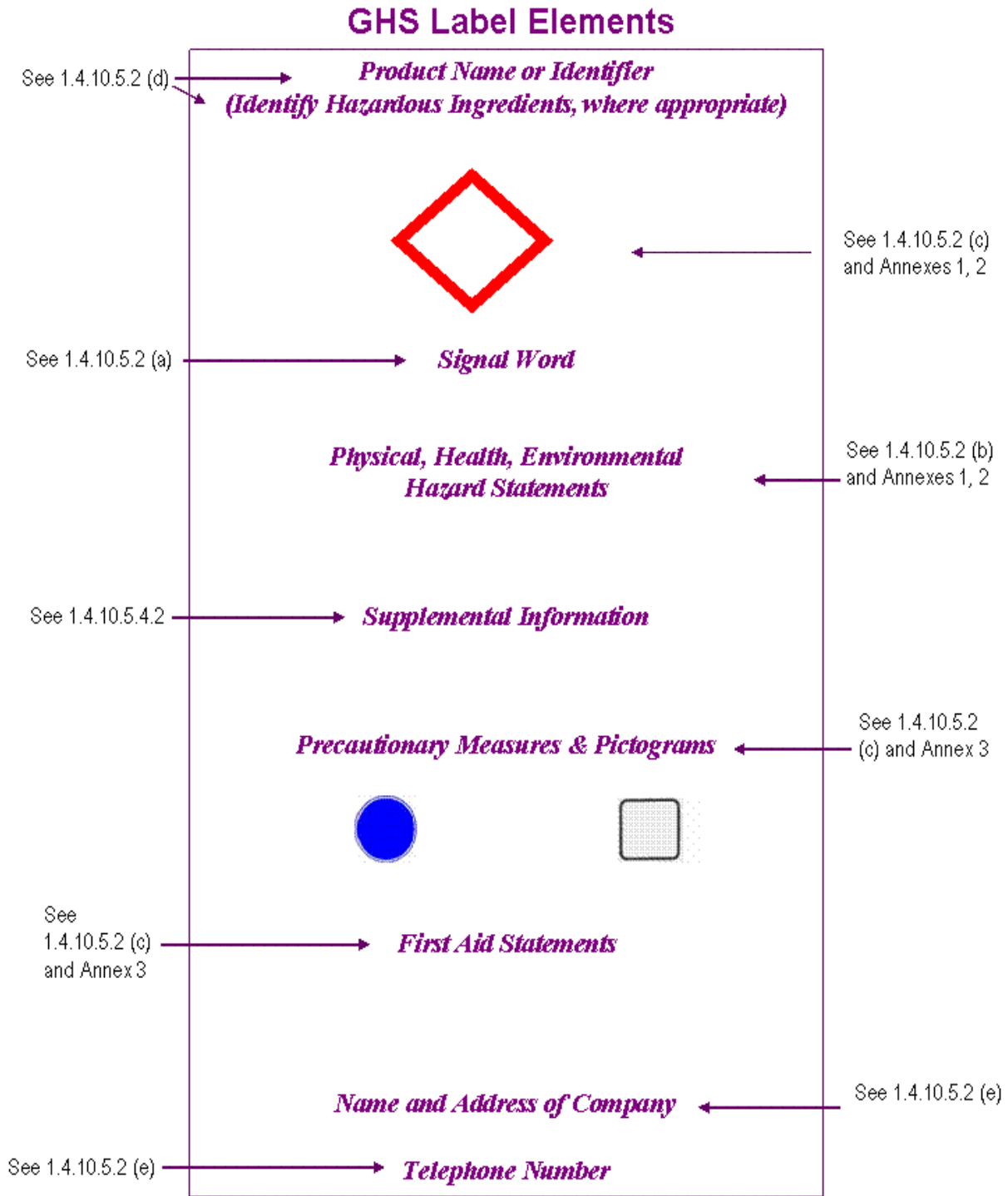























					
RATING NUMBER	HEALTH HAZARD	FLAMMABILITY HAZARD	INSTABILITY HAZARD	RATING SYMBOL	SPECIAL HAZARD
4	Can be lethal	Will vaporize and readily burn at normal temperatures	May explode at normal temperatures and pressures	ALK	Alkaline
3	Can cause serious or permanent injury	Can be ignited under almost all ambient temperatures	May explode at high temperature or shock	ACID	Acidic
2	Can cause temporary incapacitation or residual injury	Must be heated or high ambient temperature to burn	Violent chemical change at high temperatures or pressures	COR	Corrosive
1	Can cause significant irritation	Must be preheated before ignition can occur	Normally stable. High temperatures make unstable	OX	Oxidizing
0	No hazard	Will not burn	Stable	☸	Radioactive
				☸	Reacts violently or explosively with water
				☸OX	Reacts violently or explosively with water and oxidizing

Figure 4.8



Pictograms and Hazards

<p>Health Hazard</p>  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity 	<p>Flame</p>  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides 	<p>Exclamation Mark</p>  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)
<p>Gas Cylinder</p>  <ul style="list-style-type: none"> • Gases Under Pressure 	<p>Corrosion</p>  <ul style="list-style-type: none"> • Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals 	<p>Exploding Bomb</p>  <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxides
<p>Flame Over Circle</p>  <ul style="list-style-type: none"> • Oxidizers 	<p>Environment (Non-Mandatory)</p>  <ul style="list-style-type: none"> • Aquatic Toxicity 	<p>Skull and Crossbones</p>  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic)

Transport "Pictograms"		
		
Flammable Liquid Flammable Gas Flammable Aerosol	Flammable solid Self-Reactive Substances	Pyrophorics (Spontaneously Combustible) Self-Heating Substances
		
Substances, which in contact with water, emit flammable gases (Dangerous When Wet)	Oxidizing Gases Oxidizing Liquids Oxidizing Solids	Explosive Divisions 1.1, 1.2, 1.3
		
Explosive Division 1.4	Explosive Division 1.5	Explosive Division 1.6
		
Compressed Gases	Acute Toxicity (Poison): Oral, Dermal, Inhalation	Corrosive
		
Marine Pollutant	Organic Peroxides	