

# Hazard Communication

## Purpose

Simpson and Brown shall ensure that our employees are informed and trained concerning hazardous chemicals that they can be exposed to at the workplace.

## Scope and Applications

Simpson and Brown employees shall be provided with sufficient information to anticipate, recognize, evaluate, control chemical hazards, and take appropriate protective measures. Simpson and Brown's Hazard Communication Program shall be in accordance with OSHA 29 CFR 1910.1200 (Hazard Communication Standards). This program shall apply to any hazardous chemical in which is known to be present in the work place in such a manner that employees may be exposed under normal work conditions of use.

## Responsibility

Safety Department shall ensure;

- The Simpson and Brown Hazard Communication Program is well maintained and updated regularly.
- Ensure that Simpson and Brown Hazard Communication Program is enforced and properly implemented.
- All employees have received training on Simpson and Browns Hazard Communication Program

Superintendents shall ensure;

- Simpson and Browns Hazard Communication Program is readily available to employees, other contractors, and subcontractors.
- Develop a list of all identified hazardous chemicals found onsite.
- All SDS's are obtained for identified hazardous chemicals found onsite.
- Inform employees on hazards associated with all hazardous chemicals found onsite.

Employees shall ensure;

- Understanding of Simpson and Browns Hazard Communication Program
- Ability to identify hazardous chemicals through labeling and hazards associated with them.
- All containers of chemicals are labeled.
- Ability to anticipate, recognize, evaluate, control chemical hazards, and take appropriate protective measures.

## Definitions

Acute – Brief and severe.

Chemical – Any substance, or mixture of substances.

Chronic – Having long duration.

Container - Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purpose of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

Controlling contractor – A prime contractor, general contractor, construction manager or any other legal entity which has the overall responsibility for the construction of the project -- its planning, quality and completion.

Exposure or Exposed – An employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g. accidental or possible) exposure. “Subjected” in terms of health hazards includes any route of entry (e.g. inhalation, ingestion, skin contact or absorption.)

Hazardous Statement – A statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including where appropriate the degree of hazard.

Hazardous Chemical – Any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazards not otherwise classified.

Hazard Class – The nature of the physical or health hazards, e.g., flammable solid, carcinogen, or acute toxicity.

Hazard Category – Division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard class and should not be taken as a comparison of hazard categories more generally.

Health Hazard – A chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to 1910.1200 – Health Hazard Criteria.

Label – An appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

Physical Hazard – A chemical that is classified as posing one of the following hazardous effects: explosive, flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. See Appendix B to 1910.1200 – Physical Hazard Criteria.

Pictograms – A composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category. See Chart Below.

Precautionary Statement – A Phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.

Product Identifier – Name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used shall permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label, and the SDS.

Safety Data Sheet – Written or printed material concerning a hazardous chemical that is prepared in accordance with 29 CFR 1910.1200(g)

Signal Word – A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words for this hazard communication program are “Danger” and “Warning.” “Danger” is used for the more severe hazards, while “Warning” is used for less severe hazards.

### **Hazard Classification**

Hazard classification is the process of evaluating the full range of available scientific evidence to determine if a chemical is hazardous, as well as to identify the level of severity of the hazardous effect. When complete, the evaluation identifies the hazard class or classes and associated hazard category of the chemical. Only chemical manufacturers and importers are required to perform hazard classification on the chemicals they produce or import. Simpson and Brown may choose to conduct hazard classification if there are concerns about the adequacy of the hazard information received for the chemicals. If so further information on Hazard Classification can be found in 29 CFR 1910.1200(d).

### **Hazard Communication Program**

This written Hazard Communication Program has been developed in accordance with OSHA Hazard Communication Standards and will include sections on labels and other forms of warning, safety data sheet (SDS), employee training and information, list of chemicals, hazardous non-routine tasks, multi-employer workplaces, and standard operating procedures.

#### Labels and Other Forms of Warning

Simpson and Brown will ensure that each container of hazardous chemicals in the workplace are labeled, tagged, or marked. All hazardous chemicals containers are already labeled from the chemical manufacturer, importer, or distributor with the following;

1. Product Identifier;
2. Signal Word;
3. Hazard Statement(s);
4. Pictogram(s) (see chart below);
5. Precautionary Statements; and
6. Name, address, and telephone number if the chemical manufacturer, importer, or other responsible party.

In the event that a container label is defaced, removed, or nonexistent a label shall be created with the label requirements above or with the following;

1. Product Identifier; and

2. Words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemical.

### Safety Data Sheets

The manufacturer or importer of a chemical is required by OSHA to develop a Safety Data Sheet (SDS) that contains specific, detailed information about the chemical's hazard using a specified format (see below). Manufacturers may withhold certain information as proprietary (such as hazardous ingredients) on a Safety Data Sheet if the information is considered a trade secret.

#### Section 1: Identification

- Identifies the chemical on the SDS as well as recommended uses. It also provides the essential contact information of the supplier.

#### Section 2: Hazard(s) identifications

- Identifies the hazards of the chemical and the appropriate warning information associated with those hazards.

#### Section 3: Composition/information on ingredients

- Identifies the ingredient(s) contained in the product, including impurities and stabilizing additives. This section includes information on substances, mixtures, and all chemicals where a trade secret is claimed.

#### Section 4: First aid measures

- Initial care that should be given to an individual who has been exposed to the chemical.

#### Section 5: Firefighting measures

- Recommendations for fighting a fire caused by the chemical.

#### Section 6: Accidental release measures

- Recommendations on the appropriate response to spills, leaks, or releases, including containment and cleanup practices.

#### Section 7: Handling and storage

- Guidance on the safe handling practices and conditions for safe storage of chemicals.

#### Section 8: Exposure controls/personal protection

- Indicates the exposure limits, engineering controls, personal protective measures that can be used to minimize worker exposure.

#### Section 9: Physical and chemical properties

- Identifies the properties associated with the substance or mixture.

#### Section 10: Stability and reactivity

- Describes the reactivity hazards of the chemical and the chemical stability information.

#### Section 11: Toxicology information

- Identifies the toxicological and health effects information or indicates that such data is not available.

#### Section 12: Ecology information

- Provides information to evaluate the environmental impact of the chemical if it were released into the environment.

#### Section 13: Disposal consideration

- Provides guidance on proper disposal practices, recycling or reclamation of the chemical or its container and the safe handling practices.

#### Section 14: Transport information

- Provides guidance on classification information for shipping and transporting hazardous chemicals by road, air, rail or sea.

#### Section 15: Regulatory information

- Identifies the safety, health, and environmental regulations specific for the product that is not indicated anywhere else on the SDS, including any national and/or regional regulatory information.

#### Section 16: Other information, including date of preparation or last revision

- This section indicates when the SDS was prepared or when the last known revision was made. The SDS may also state where the changes have made to the previous version.

#### List of Chemicals

Any chemical in which is known to be present in the work place in such a manner that employees may be exposed under normal work conditions of use will be listed on "List of Chemicals" form. Further information regarding the chemical can be found on the Safety Data Sheet. Once the project is completed the form will be given to Safety Director and/or Safety Coordinator to help update SDSs and for recordkeeping.

See form below.

#### Hazardous Non-Routine Tasks

Periodically, Simpson and Brown employees are required to perform hazardous non-routine tasks. Prior to employees performing any non-routine tasks that may expose them to hazardous chemicals, their supervisors will inform them about the chemical's hazards. The supervisor will also inform them about how to control exposure and what to do in an emergency. The Safety Director will evaluate the hazards of these tasks and provide appropriate controls including Personal Protective Equipment. Any additional training will be done prior to performing any non-routine task.

Examples of non-routine tasks that may expose employees to hazardous chemicals include the following: Confined Space Entry, using epoxy coatings, cutting coated materials, etc.

### Hazards Associated with Chemical Contained in Unlabeled Pipes in Work Area

If workers find themselves working next to unlabeled pipes with chemicals inside of them, workers shall immediately stop work. The most significant danger present is if the pipe is damaged and the chemical is released. The chemical's Safety Data Sheet will be reviewed by the supervisor and working crew. In the case that the chemical is unknown, work shall not commence until more information can be obtained. The supervisor will also review emergency procedures in case of chemical release for that specific chemical. The Safety Director will be contacted to evaluate the hazards of the task. With permission from the controlling contractor, labels shall be made and put in place to identify the chemical and hazards associated with it.

### Multi-Employer Workplace

If any other employer's employees may be exposed to hazardous chemicals that Simpson and Brown has at its workplace, it will be the site supervisor's responsibility to provide the employer with Simpson and Brown's Hazard Communication Program. They shall also provide a copy of "List of Chemicals" form along with the SDSs for the listed chemicals. This information will be provided as soon as possible and will be updated appropriately. If the sub-contractor or other contractor have any additional questions regarding our program and/or hazardous chemicals, they may contact Simpson and Brown's Safety Director or Safety Coordinator.

### Employee Training and Information

Training will consist of an extensive look at Simpson and Brown's Hazard Communication Program as well as site specific training on work site hazardous chemicals. After training, employees will be able to anticipate, recognize, evaluate, control chemical hazards, and take appropriate protective measures. Employees will then be evaluated by the Safety Director and Safety Coordinator before they can be certified for the completion of Simpson and Brown's Hazard Communication Program training. Training will be refreshed on a yearly basis at Simpson and Brown's Safety Day. Records of the training will be kept by the Safety Director and Safety Coordinator.

## **Standard Operating Procedures (SOPs)**

### Labels and Other Forms of Warning

- a. If a container has no label or label is illegible, employee shall notify supervisor immediately for proper labelling.
- b. No employee shall remove or deface a container label without notifying their supervisor for approval.
- c. Container labels shall be verified for proper labelling whenever a hazardous chemical is received. In the event a label does not have adequate information, supervisor shall be notified.
- d. No container that was previously used for a beverage shall be used for any chemical.
- e. Container labels shall be legible and in English.
- f. When creating a label the SDS shall be used.

### Safety Data Sheets

- g. SDS's shall always be readily available to all employees during their work shift.
- h. Employees can review the SDS's for all the chemicals present at the workplace.
- i. The SDS's shall be present in the workplace trailer and/or foreman's vehicle.

- j. If a different location is being used instead of the locations provided the site supervisor will identify the location to the employees prior to the work commencing.
- k. The SDS's will be updated by the Safety Director and Safety Coordinator.
- l. If an SDS is not readily available at the work place employees can obtain the information about the chemical by contacting Safety Director or Safety Coordinator.









#### List of Chemicals

- a. List shall be completed on the first initial work day.
- b. List shall be updated whenever a new hazardous chemical is received at the workplace.
- c. Name or product identifier shall remain the same across all references (SDS and Label).

#### Training

- a. Hazard Communication Training shall be done on a yearly basis at Simpson and Brown's Safety Day.
- b. Site specific Hazard Communication training shall be done at the time of the initial job assignment.
- c. Site specific training shall review Simpson and Brown Hazard Communication Program, Stop Work Authority, Site specific SDS's, and Simpson and Brown's policies, work practices, and SOP's (Standard Operating Procedures).
- d. Records of training shall be kept by Safety Director and Safety Coordinator.

## Pictograms

Flame	Flame Over Circle	Exclamation Mark	Exploding Bomb
<div style="text-align: center;">  </div> <p style="text-align: center;">Flammables</p> <p style="text-align: center;">Self Reactives</p> <p style="text-align: center;">Pyrophorics</p> <p style="text-align: center;">Self-Heating</p> <p style="text-align: center;">Emits Flammable Gas</p> <p style="text-align: center;">Organic Peroxides</p>	<div style="text-align: center;">  </div> <p style="text-align: center;">Oxidizers</p>	<div style="text-align: center;">  </div> <p style="text-align: center;">Irritant</p> <p style="text-align: center;">Dermal Sensitizer</p> <p style="text-align: center;">Acute Toxicity (Harmful)</p> <p style="text-align: center;">Narcotics Effects</p> <p style="text-align: center;">Respiratory Tract Irritation</p>	<div style="text-align: center;">  </div> <p style="text-align: center;">Explosives</p> <p style="text-align: center;">Self Reactives</p> <p style="text-align: center;">Organic Peroxides</p>
Corrosion	Gas Cylinder	Health Hazard	Skull and Crossbones
<div style="text-align: center;">  </div> <p style="text-align: center;">Corrosives</p>	<div style="text-align: center;">  </div> <p style="text-align: center;">Gases Under Pressure</p>	<div style="text-align: center;">  </div> <p style="text-align: center;">Carcinogen</p> <p style="text-align: center;">Respiratory Sensitizer</p> <p style="text-align: center;">Reproductive Toxicity</p> <p style="text-align: center;">Target Organ Toxicity</p>	<div style="text-align: center;">  </div> <p style="text-align: center;">Acute Toxicity (Severe)</p>



		Mutagenicity Aspiration Toxicity	
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### List of Chemicals

Supervisor:

Job Site:

Any hazardous chemical in which is known to be present in the work place in such a manner that employees may be exposed under normal work conditions of use will be listed below. The product identifier/name should remain the same as it is on the SDS for easy cross referencing.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.

Note: Further information regarding the chemical can be found on the Safety Data Sheet.