Introduction
San Francisco State University (SFSU or University) has developed this Hazard Communication Program to comply with the Cal/OSHA Hazard Communication Standard (California Code of Regulations, Title 8, General Industry Safety Order, Section 5194). Components of the program include labeling of hazardous substances in the workplace, providing information such as Safety Data Sheets (SDSs) for hazardous substances, and training employees on chemical hazards in the workplace.

The Hazard Communication Standard (HazCom) requires employers to alert employees of the existence of potentially dangerous chemical substances in the workplace and the proper means and methods to protect themselves against exposure. This includes chemicals, paints, inks, cleaning agents, asbestos containing material, compressed gases, and others.

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# San Francisco State University

## Hazard Communication Program

**Revision Date:** 11/5/2019

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1.0 Purpose and Scope of This Program

The purpose of the written Hazard Communication Program is to describes our program of informing employees about:

- hazardous substances they may encounter in the workplace,
- potential harmful effects of these substances and
- appropriate control measures

1.1 Covered Employees, Operations, and Substances

This Hazard Communication Program applies to:

1. Hazardous chemicals purchased and used by SFSU employees for non-laboratory uses;
2. All non-laboratory SFSU employees;
3. Hazardous substances purchased and used by other SFSU administrative units and contractors performing work in any University controlled work space;
4. For the purposes of this program, substances that have a manufacturer’s SDS

"Hazardous chemical" means any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified. See Appendix A for more definitions.

1.2 Partially Exempted Operations and Exempt Substances

1. Research Laboratory operations are partially exempted from the provisions of this Hazard Communication Program because they are addressed under the Chemical Hygiene Plan. Such research laboratory operations shall:
   - Ensure that labels are not removed or defaced (see Section 3.0), and
   - Maintain SDSs and ensure SDSs are available to employees (see Section 4.0).
   - Maintain a current inventory of hazardous substances used or stored (see Section 5.0).

Refer to the SFSU Chemical Hygiene Plan for specific requirements affecting laboratory employees. This plan is available online and in blue binders in laboratories.

2. The following substances are exempt from the requirements of this program per §5194 (b)(5):
   - Hazardous waste;
   - Tobacco or tobacco products;
   - Wood or wood products, including lumber which will not be processed and the only hazard they pose to employees is the potential for flammability or combustibility;
   - Articles (see definition in Appendix A);
2.0 Responsibility for Implementing HazCom

Departments and other administrative units are required to maintain an inventory of the hazardous materials they use or store in areas under their jurisdiction and to make the written Hazard Communication program available to employees.

2.1 Faculty and Staff Supervisors

Supervisors are responsible for implementing the Hazard Communication Program at the local operational level and ensuring the safe use of hazardous substances for all areas under their supervision:

1. Identifying hazardous substances present in the work area
   - Maintaining an inventory list of hazardous substances present in the work area.
   - Ensuring hazardous substances are appropriately labeled or posted.

2. Obtaining Safety Data Sheets (SDSs) for hazardous substances matching the inventory and making sure that SDSs are available to their employees during working hours.

3. Training employees on labeling and storage expectations, physical hazards, health hazards, safe handling procedures, and emergency procedures for the hazardous substances they work with.

4. Enforcing safe behavior and adherence to established safety procedures.

5. Adequately informing any non-University personnel sharing the same work area of the hazardous substances to which their employees may be exposed while performing their work.

2.2 Employees

Employees are responsible for knowing the hazards and precautionary procedures for the hazardous substances used in their work area. If unsure employees are encouraged to ask their supervisor or Environment, Health & Safety (EH&S) department before working with materials they are unsure of.

1. Completing job-specific training before working with hazardous substances.
   - Know how to get Safety Data Sheets and inventory of hazardous substances

2. Planning and conducting operations in accordance with established procedures and good safety practices.

3. Using personal protective equipment and clothing in accordance with prescribed training.
2.3 Environment, Health & Safety Department
EH&S is responsible for providing resources (i.e., reference materials) and technical support to ensure employees are protected from hazardous substances, and

(1) Developing and implementing the HazCom Program and performing an annual review;
(2) Assisting supervisors in identifying hazardous substances present in the work area and evaluating potential hazards of operations;
(3) Monitoring on-line University Hazard Communication training for employees;
(4) Assisting supervisors with job-specific employee training for all employees under the Hazard Communication Program;
(5) Recommending appropriate engineering controls, administrative controls and personal protective equipment.

3.0 Container Labels and Warnings
Every container of a hazardous substance must be labeled, tagged, or marked to identify the substance and to provide appropriate warnings.

- Detailed information on labels and label requirements, and pictograms can be found online on OSHA’s website. California’s HazCom Standard incorporates Appendix C in 29 CFR1910.1200:
  OSHA Appendix C-Mandatory
- Appendix B of this HazCom program has information concerning the pictograms associated with strictly defined hazards in the May 2013 revision of the California Hazcom Standard.

3.1 Manufacturer Original Labels
Do not accept hazardous substances in their original containers if they are not properly labeled. The manufacturer’s original label shall provide the following information.

- Identity of the hazardous substance;
- Signal word;
- Hazard statement(s);
- Pictograms (see Appendix B);
- Precautionary statement(s); and
- Name and address of the manufacturer, importer or responsible party.

3.2 Container Label Requirements
(1) The label must identify the contents AND include the most significant hazard(s). In addition, labels shall be
  - Legible,
  - In English,
Prominently displayed on the container.

(2) The original label shall not be removed or defaced unless the container is immediately marked with the required information.
   - The old label(s) must be completed removed or defaced so the new label is clearly identifiable.
   - The ink, sticker, or tag with the information must be such that it is not easily rubbed off or otherwise rendered illegible.

(3) Synthesized substances or byproducts created as part of research operations, which do not leave the University, must be labeled with their reactants and possible products (e.g., Grignard reagent) or by a useful generic description (e.g., long-chain ketone) and their probable hazardous properties.

### 3.3 Non-hazardous substances
Non-hazardous liquids and other substances (e.g., distilled water or Alconox) in hazardous materials areas must also be labeled in order to avoid confusion. Standard salt or sugar water cannot be distinguished from acetone or dilute hydrochloric acid, etc. by visual means alone. However, the inclusion of hazard information or pictograms is not necessary.

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**Primary Container**: The original manufacturer’s container.

**Transfer Container**: A secondary container into which a material from the ‘primary container’ is placed or transferred.

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### 3.4 Alternative Labeling Methods (for Laboratories)

(1) Occasionally the container is too small or slick to fit a label with the required information. In this case, the tray, beaker, etc. holding the small containers must have the proper labeling. The individual containers, vials, etc. still need to be marked with enough information to identify where they came from in case of separation from the larger container or tray.

(2) Alternative methods such as signs, placards, process sheets, and operating procedures are acceptable for individual stationary process containers, provided that the information is conveyed to all affected persons.

(3) In stockroom storage rooms, commonly used reagents for classrooms may be marked with the short version of the name on the transfer containers, as long as the full chemical name, significant hazard(s), and precautions or other safety-related information is clearly posted inside the room.
3.5 Unlabeled Pipes
SFSU employees shall not work on or open any unlabeled or labeled pipes in the buildings, unless the following preparations are completed:

- Authorization to do the work from EH&S, Facilities Service Enterprises, or Capital Planning management
- Receipt of information from a designated person about the hazardous substance within the pipe, potential hazards, and appropriate safety precautions
- Safety precautions are in place prior to starting work

SFSU requires all pipes within a work area to be identified and labeled whether or not they contain hazardous substances.

4.0 SAFETY DATA SHEETS
The purpose of a Safety Data Sheet (formerly MSDS) is to provide health and safety data about a specific hazardous substance. The Safety Data Sheet or SDS discloses the chemical composition, physical hazards, health hazards, and other information about a hazardous substance or material as specified by OSHA.

4.1 SDS Requirements
1. A SDS shall be available for every hazardous substance used in a work area and shall be accessible to employees during working hours.
2. SDSs shall be in English and contain the following information as specified in: Mandatory Appendix D Quick Fact
3. If employees travel between workplaces, the SDSs may be kept at a central location (e.g., shop). However, employees shall be able to obtain the required information in an emergency.

4.2 Obtaining SDSs
1. A SDS shall be provided by the manufacturer/importer/distributor with or before the initial shipment of the hazardous substance(s) and with or before the first shipment after an SDS is updated.
(2) If the SDS is not provided with the shipment, the purchaser (e.g., laboratory/shop supervisor) shall obtain one from the manufacturer, importer or distributor prior to use of the purchased material.

(3) Supervisors must ensure employees can obtain SDSs from the following sources:
   - SDS file or binder in work area
   - Computer file accessible to all employees during working hours

4.3 Trade Secrets
Manufacturers and importers may withhold the specific chemical identity of a hazardous substance with certain “trade secret” provisions. Contact EH&S for assistance if information in an SDS is withheld as a “trade secret.”

5.0 Inventory Of Hazardous Substances
Locations that store hazardous materials must maintain a copy of their inventory, and a copy of the current safety data sheet (SDS) for each hazardous chemical on hand.

5.1 Inventory Listing
(1) Each hazardous material must be listed by the name on the original manufacturer’s label.
   - The names on the manufacturer’s label, its Safety Data Sheet, and inventory listing should match.
   - Other names may be cross-referenced on an index as long as the name on the inventory entry matches the label name.

(2) Delete materials no longer present from the inventory.

(3) Inventories must be updated whenever new materials are ordered or when a material is deleted.

(4) EH&S submits a hazardous materials inventory to the City as part of the SFSU Hazardous Materials Business Plan annual update. This is due March 1 each year.

5.2 Inventory Maintenance
(1) Departments must submit an updated chemical inventory to EH&S by Feb 1 of each year.

(2) Faculty and staff who are responsible for rooms where hazardous materials are stored (including compressed gases) must maintain an accurate inventory of these materials.

(3) The “CHEMICALS” laboratory inventory management software is available to facilitate maintaining an up to date chemical inventory using QR codes to electronically enter and delete chemical containers from the inventory. For more information go to: https://www.csustan.edu/sites/default/files/groups/Safety%20%26%20Risk%20Management/Implementation/getting_started_and_faqs--csu.pdf
5.3 Availability of the Inventory to Employees

A copy of the location by location campus chemical inventory is available through EHS.

(1) This inventory is available to all employees during working hours by contacting EHS.

(2) Principal Investigators (PIs) and Supervisors must maintain a current inventory of the hazardous substances in their own areas available for their staff and students.

(3) For departments with few hazardous materials, the inventory may be maintained by the Department Safety Coordinator in the department office. Examples of departments that fall under this category are:
   - Mathematics
   - Computer Science
   - Psychology
   - Earth and Climate Sciences
   - English and other Languages
   - History

Hazardous and toxic substances are defined as those chemicals present in the workplace which are capable of causing harm. In this definition, the term ‘chemicals’ includes dusts, mixtures, and common materials such as paints, fuels, and solvents.

6.0 HAZARD COMMUNICATION INFORMATION AND TRAINING

All faculty, staff and students who may come into contact with hazardous chemicals shall be trained in safe handling procedures, health and safety hazards, labeling, SDSs and personal protective equipment.

6.1 Employee Training

(1) Employees shall complete the following trainings:
   - Online Hazard Communication Training provided by the University and
   - Job-specific Hazard Communication Training provided by their supervisor or designee before they are exposed to the hazards of the job, and within 30 days of starting work.

(2) HazCom training will include the following topics:
   (a) Requirements of §5194–Hazard Communication Standard.
   (b) Operations in their work area where hazardous chemicals are present
   (c) Location and availability of the written hazard communication program, including the inventory of hazardous substances and safety data sheets (SDS)
(d) Employees shall be trained in the methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area.

Specifically, employees shall be informed that releases are commonly detected:

1. Visually - by spilled liquid or solid contents, discoloration of surfaces, smoke mist, or fire around a surface.
2. Audibly - by the sound of escaping gases, or the sounds of chemical reactions such as fizzing, popping or cracking
3. By smell - when the chemical being released has a detectable odor, or causes a fire. *(Chemicals whose odors are detectable at concentrations below dangerous levels are said to have good warning properties.)*
4. By physical effects - such as irritation, burning, itching, or pain when contact with the skin or eyes has taken place.
5. By physical effects - such as throat or lung irritation, coughing or wheezing
6. By physical effects - such as dizziness, lightheadedness, loss of balance, or a drunken feeling, feeling sick, nauseous, etc.
7. By physical effects - such as feeling cold when cryogenic liquids are present
8. By taste – if the material has been ingested or sensed by the nose or mouth, or by
9. Using monitoring devices, such as gas detectors for oxygen, CO, CO2, flammable gases
10. Using industrial hygiene air monitoring devices for specific toxic dusts, mists, or gases

(e) Employees shall be trained in the physical, health, simple asphyxiation, combustible dust and pyrophoric gas hazards, as well as hazards not otherwise classified, of the chemicals in the work area

(f) Employees shall be trained in measures they can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency and first aid procedures, and personal protective equipment to be used.

(g) Employees shall be trained in the details of the hazard communication program developed by the employer, including an explanation of the labels received on shipped containers and the workplace labeling system used by their employer and the safety data sheet, and how employees can obtain and use the appropriate hazard information.

1. Directions on how to read Safety Data Sheets and container labels
2. Review of hazard pictograms listed in Appendix B

(h) Employers shall inform employees of the right:

1. To personally receive information regarding hazardous substances to which they may be exposed, according to the provisions of this section;
2. For their physician or collective bargaining agent to receive information regarding hazardous substances to which the employee may be exposed according to provisions of this section;
3. Against discharge or other discrimination due to the employee's exercise of
the rights afforded pursuant to the provisions of the Hazardous Substances Information and Training Act.

(3) Employees working in laboratories will also be required to take the on-line course, “Lab Safety Fundamentals”

(4) EHS Training for chemical handlers and laboratory workers is described by the CSU-EHS Master Training Matrix (for SFSU).

6.2 Frequency of Training
Employees shall be trained on hazardous substances in their work area:
- Upon initial assignment and
- Whenever a new hazard is introduced into the work area.

6.3 Recordkeeping of Training
On Line course documentation is maintained by CSU-Learn.

Training records for instructor led and iLearn courses shall be sent to EH&S for documentation within CSU-Learn.

6.4 Other Required Hazard Communication Training – Non-Routine Operations
Supervisors shall inform employees of the hazards, preparations for reducing risk, and safety procedures for non-routine tasks in their work area. Examples may include the following:
- Requiring the presence of another employee during the task
- Ensuring ventilation is working and adequate to the task
- Inspecting equipment, such as ladders and chemical containers before use
- Having the necessary personal protective equipment, chemical transport container, etc.

7.0 INFORMING CONTRACTOR AND CONTRACT WORKERS
Outside contractors are also covered under the HAZCOM Standard and must be informed of any potential chemical hazards their workers could come across during their work. The SFSU Project Manager is responsible for providing this information to contractors working in areas where hazardous materials could pose a health or safety risk to contractor employees.

(1) Contractors who bring hazardous materials into a Department work area are expected to inform and provide the SFSU Project Manager with a chemical inventory and associated SDSs.

The SFSU Project Manager is responsible for ensuring that EH&S has this information before the work starts.

(2) The contractor is responsible for removing all unused portions of products/chemicals and any waste products from the University.
For information and follow up concerning contractor chemicals or materials, contact EH&S at x8-2565. Upon request, EH&S can obtain the required information from the SFSU Project Manager and forward it on to the department.
Appendix A — Definitions

| Article | A manufactured item (1) which is formed to a specific shape or design during manufacture; (2) which has end use functions(s) dependent in whole or in part upon its shape or design during end use; and (3) which does not release, or otherwise result in exposure to a hazardous substance under normal conditions of use or in a reasonably foreseeable emergency resulting from workplace operations. |
| Classification: | To identify the relevant data regarding the hazards of a chemical; review those data to ascertain hazards associated with the chemical; and decide whether the chemical will be classified as hazardous, and the degree of hazard where appropriate, by comparing the data with the criteria for health and physics hazards. |
| Container: | Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, tank truck or the like that contains a hazardous substance. For purposes of this section, pipes or piping systems are not considered to be containers. |
| Emergency: | Any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment, which may or does result in a release of a hazardous substance into the workplace. |
| Exposure or exposed: | Any situation arising from work operation where an employee may ingest, inhale, absorb through the skin or eyes, or otherwise come into contact with a hazardous substance. |
| Hazard category: | The division of criteria within each hazard class. |
| Hazard class: | The nature of the physical, health or environmental hazard. |
| Hazard classification: | An evaluation of chemicals to determine the hazard classes, and where appropriate, the category of each class that applies to the chemical being classified. |
| Hazard statement: | A statement assigned to a hazard class and category that describes the nature of the hazards of a hazardous product, including, where appropriate, the degree of hazard. |
| Hazard warning: | Any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the health hazards and physical hazards of the substance(s) in the container(s). |
| Hazardous substance: | Any substance which is a physical hazard or a health hazard or is included in the List of Hazardous Substances prepared by the Director pursuant to Labor Code section 6382. |
| 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. Detailed explanations of health hazards classifications can be found online: [https://www.osha.gov/dsg/hazcom/appendix_a.pdf](https://www.osha.gov/dsg/hazcom/appendix_a.pdf) |
## Appendix A — Definitions (Continued)

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immediate use:</strong></td>
<td>The hazardous substance 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.</td>
</tr>
<tr>
<td><strong>Physical Hazard:</strong></td>
<td>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. Detailed explanations of physical hazards classifications can be found online: <a href="https://www.osha.gov/dsg/hazcom/appendix_b.pdf">https://www.osha.gov/dsg/hazcom/appendix_b.pdf</a></td>
</tr>
<tr>
<td><strong>Pictogram:</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Precautionary statement:</strong></td>
<td>A phrase (and/or pictogram) that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous product, or improper storage or handling of a hazardous product.</td>
</tr>
<tr>
<td><strong>Proposition 65:</strong></td>
<td>Also known as the Safe Drinking Water and Toxic Enforcement Act of 1986, this law requires the state to publish a list of chemicals known to cause cancer, birth defects, or other reproductive harm.</td>
</tr>
<tr>
<td><strong>Signal word:</strong></td>
<td>A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The words 'Danger' and 'Warning' are used as signal words.</td>
</tr>
<tr>
<td><strong>Trade secret:</strong></td>
<td>Any confidential formula, pattern, process, device, information, or compilation of information which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it. A trade secret shall not include chemical identity information which is readily discoverable through qualitative analysis.</td>
</tr>
<tr>
<td><strong>Work area:</strong></td>
<td>A room or defined space in a workplace where hazardous substances are produced or used, and where employees are present.</td>
</tr>
</tbody>
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Appendix B — Pictograms

Full details on the new OSHA Hazard Classification system is available on their website: [OSHA](#) Appendix C

A short version, OSHA BRIEF, is available on the website as well: [OSHA BRIEF 3636, Labels and Pictograms](#)
Appendix C — Review and Amendment Log

The SFSU Hazard Communication Program must be reviewed annually and updated as needed.

<table>
<thead>
<tr>
<th>Date</th>
<th>Amendments</th>
<th>Pages/Sections</th>
<th>Reviewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/20/19</td>
<td>Added details to how chemical releases can be identified</td>
<td>6.1d</td>
<td>Majewski</td>
</tr>
<tr>
<td>10/20/19</td>
<td>Added Lab Safety Fundamentals course requirement</td>
<td>6.1 (3)</td>
<td>Majewski</td>
</tr>
<tr>
<td>10/20/19</td>
<td>Added reference to CSU-EHS Master Training Matrix requirement</td>
<td>6.1(4)</td>
<td>Majewski</td>
</tr>
<tr>
<td>10/20/19</td>
<td>Added information on the availability of the campus inventory from EHS</td>
<td>5.2 (3)</td>
<td>Majewski</td>
</tr>
<tr>
<td>10/20/19</td>
<td>Added information on the &quot;CHEMICALS&quot; software program</td>
<td>5.2</td>
<td>Majewski</td>
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</tbody>
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