



HAZARD COMMUNICATION PROGRAM

The Ragon Institute

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LIST OF ABBREVIATIONS AND ACRONYMS

CFR	Code of Federal Regulations
EH&S	Environmental Health and Safety
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
HAZCOM	Hazard Communication
MGH	Massachusetts General Hospital
OSHA	U.S. Occupational Safety and Health Administration
PI	Principal Investigator
SDS	Safety Data Sheet

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Figure 2.1	Example of a label that is compliant with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).
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1.0 GENERAL INFORMATION

In order to comply with the U.S. Occupational Safety and Health Administration (OSHA) Standard Title 29 Code of Federal Regulations (CFR) Section 1910.1200, *Hazard Communication*, the following written Hazard Communication (HAZCOM) Program is established for the Ragon Institute. This program applies to all work operations within the Institute where employees may be exposed to hazardous substances during normal working conditions or during an emergency situation. This written program may be obtained from the Ragon Institute Environmental Health and Safety (EH&S) office in room 963 or online via Ragon Connect. Under this program employees will be informed of the contents of the OSHA Hazard Communication Standard, the hazardous properties of the chemicals and materials with which they work, the safe handling procedures, and measures to take to protect themselves from these chemicals.

The Principal Investigators (PIs), Laboratory Managers, and the Facility Manager are ultimately responsible for ensuring that all applicable provisions and components of the Ragon HAZCOM Program are implemented as required within their respective laboratories and work areas. To this end, PIs, Laboratory Managers, and the Facility Manager are encouraged to designate a person or persons to see to it that each of the program elements are being fully addressed (e.g., labeling, Safety Data Sheets [SDSs] availability to employees, employee training and information, maintaining a list of hazardous materials in the laboratory, informing employees of hazardous non-routine tasks, etc.).

The provisions of this program will apply in all situations involving the use of hazardous materials that are not otherwise included within the scope and coverage of the Ragon Institute Chemical Hygiene Plan. This HAZCOM Program applies to the laboratory and non-laboratory areas within the Ragon Institute.

2.0 CONTAINER LABELING

All employees handling chemicals at the Ragon Institute will verify that all containers of hazardous chemicals received from manufacturers, distributors, or importers are clearly labeled to indicate:

- The identity of the contents. The identity of the contents must match the corresponding SDS.
- Appropriate hazard warnings, including routes of entry into the body and the target organs, if known.
- The name and address of the manufacturers, importer, or responsible party.

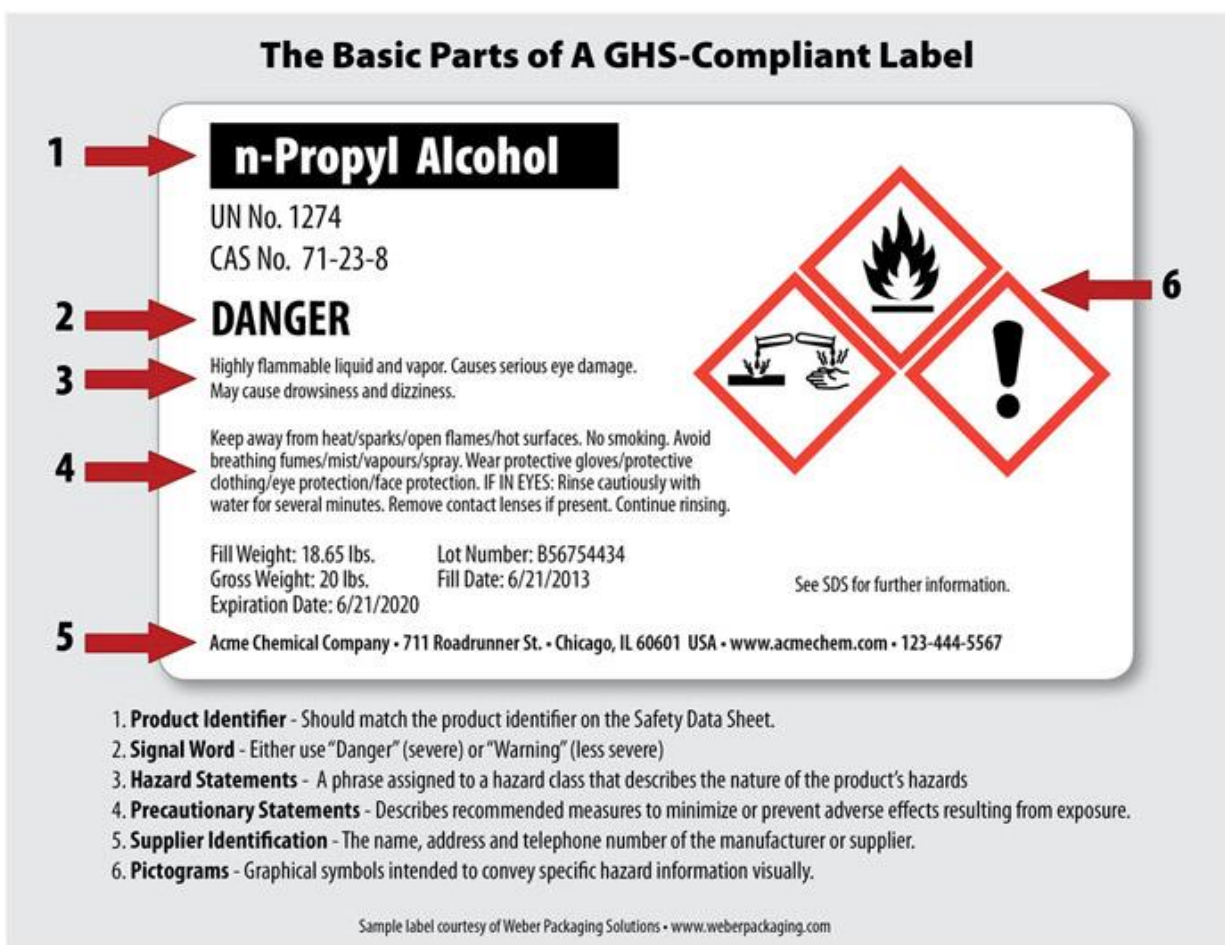
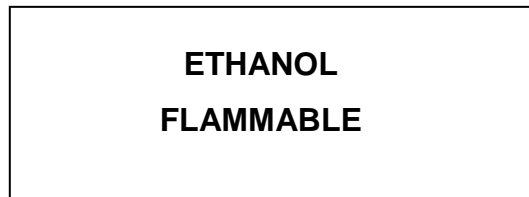


Figure 2.1 Example of a label that is compliant with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Employees will ensure that secondary containers are properly labeled when required. Chemicals that are transferred from a labeled container to a portable container for the immediate use by the person transferring the chemical do not require a label on the portable container. Ragon policy

recommends that all containers be labeled in English despite the intended period of use. The person in charge will assure that hazard warning labels on the containers are not removed or defaced unless the hazard is no longer present.

Secondary containers must be labeled with the name of the hazardous chemical (no abbreviations) and the hazard associated with the hazardous chemicals in English. Labels used for secondary containers may be copies of the original manufacturers' labels or a facsimile. The following is an example of a label:



When employees speak other languages, they may add the information in the non-English language as long as the information is presented in English as well for Emergency Response purposes.

3.0 SAFETY DATA SHEETS

The SDS is a detailed information bulletin prepared by the manufacturer or importer of a chemical product or chemical substance. It describes the chemical and physical hazards associated with the product or substance, its physical and chemical characteristics, when and how it may be hazardous, the effects of exposure, precautions for safe handling and use, emergency and first aid procedures, and control measures that are applicable.

Sometimes an SDS contains information that may not apply to your particular operation. In such cases, concentrate essentially on the information that is applicable to your situation. In general, employees should focus on the hazard information and what protective measures to take. Employers are required to maintain or make available to employees a complete and accurate SDS for each hazardous chemical that is used in the workplace.

OSHA has determined that drugs and medications that are not in solid or final form for direct administration to the patient fall within the scope of HAZCOM and, therefore, must be covered by SDSs. Accordingly, SDSs must be available for all drugs and medications that are liquid, gaseous, aerosol, etc., or not otherwise in solid, final form. SDSs for such products will be available from the host institution's hospital pharmacy, drugs and medications manufacturers or distributors. SDSs for chemical products other than pharmaceuticals are available from the manufacturers or suppliers of the product and employers (users) are automatically entitled to this information upon purchase of the product.

When hazardous substances are received without an SDS and one is not available from a previous purchase, a letter with a copy to file should be sent to the supplier requesting the SDS. If the supplier fails to furnish the requested information, notify the Ragon EH&S office at 857-268-7116 or email Matthew Bedford at mbedford@mg.harvard.edu.

PIs, Laboratory Managers, and the Facility Manager will ensure that any and all incoming SDSs are reviewed for new and significant health/safety information and pass any such information on to the affected employees. This may be done through delegation. Copies of SDSs for all toxic and hazardous substances that any person working at the Ragon Institute may be exposed to must be readily accessible to all areas where the substances are used, handled, or stored. SDSs will be available to all employees for their review during each work shift. An electronic version of the SDS may be used as long as each employee who used the hazardous material has access to the electronic version of the SDS. If an SDS is not available for any particular chemical or product, employees should contact their supervisor.

For assistance with interpreting and applying the information contained in the SDS, contact the Ragon EH&S Office at 857-268-7116. To obtain an SDS:

- Ask your Laboratory Manager, Floor Manager, PI, the Facility Manager, or EH&S for the location of the SDS file.
- Access the Massachusetts General Hospital (MGH) online SDS website: <http://msdssrc.net/>

DO NOT ENTER your Partners ID or Password. Use the following:

- Enter the letters **MGH** as your **Username**.
 - Enter the letters **MGH** as your **Password**.
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- Contact the manufacturer of the product.
 - Online Web SDS searches.
 - Contact the EH&S Office.

4.0 SAFETY DATA SHEET CHECKLIST

The HAZCOM Program is aligned with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), which requires a format that has 16 sections on all SDSs. Each SDS will be checked to ensure that all 16 sections are present:

- Section 1—Identification
- Section 2—Hazard(s) elements
- Section 3—Composition/information on ingredients
- Section 4—First-aid measures
- Section 5—Fire-fighting measures
- Section 6—Accidental release measures
- Section 7—Handling and storage
- Section 8—Exposure controls/personal protection
- Section 9—Physical and chemical properties
- Section 10—Stability and reactivity
- Section 11—Toxicological information
- Section 12—Ecological information
- Section 13—Disposal considerations
- Section 14—Transport information
- Section 15—Regulatory information
- Section 16—Other information

5.0 EMPLOYEE TRAINING AND INFORMATION

Under the OSHA HAZCOM Standard, employers are required to inform employees where hazardous chemicals and/or products, including pharmaceuticals, are present at the time of their initial assignment to a work area (i.e., the Ragon Institute laboratory) as well as each time a new hazard is introduced into the work area.

PIs are responsible for ensuring employees complete the required Laboratory Safety Training that is part of the initial/annual Ragon EH&S training. Prior to starting work, each new employee will receive information and training on the following as appropriate with their respective jobs. Training will cover the following topics (at a minimum):

- An overview of the requirements contained in the OSHA HAZCOM Standard, 29 CFR 1910.1200.
- Operations in their work area where hazardous chemicals, chemical products, or applicable pharmaceuticals are present.
- Location and availability of the written hazard communication program.
- Physical and health effects of the toxic or hazardous substances.
- Methods and observation techniques used to determine the presence or release of toxic and hazardous substances in the work area.
- How to use toxic and hazardous substances in the safest possible manner, including safe work practices and personal protective equipment requirements.
- Steps that Ragon has taken to lessen or prevent exposure to toxic and hazardous substances.
- Emergency procedures to follow, if exposed to these toxic and hazardous substances.
- How to read labels and review SDSs to obtain appropriate hazard information.
- Location of SDS file and location of toxic and hazardous substances list.

For more information regarding the Ragon Institute EH&S training program, please contact the Ragon EH&S Office at 857-268-7116.

6.0 LIST OF HAZARDOUS CHEMICALS, CHEMICAL PRODUCTS, APPLICABLE PHARMACEUTICALS

Each affected department will maintain a list, referred to as the Chemical Inventory, of all known toxic and hazardous substances present or used within their respective work areas. A copy of the Chemical Inventory is to be maintained in the department's files and provided to the Ragon EH&S Office. The inventory may be maintained by common chemical or trade names for each hazardous material and must include storage location. It is recommended to update this chemical inventory on a periodic basis (at a minimum on an annual basis or when significant additions or subtractions are made to the inventory).

7.0 HAZARDOUS NON-ROUTINE TASKS

If employees are required to perform potentially hazardous non-routine tasks, each affected employee will be given information by the department head or supervisor about any hazardous chemicals that they may be exposed to after consultation with the Ragon EH&S office. This information will be given to the employee prior to starting work on such projects. This information will include:

- Specific hazards.
- Protective/safety measures the employee can take.
- Measures that Ragon has taken to lessen the hazards including ventilation, respirators, presence of another employee, and emergency procedures.

An example of a non-routine task performed by staff at the Ragon Institute is the cleanup of minor hazardous material spills.

8.0 INFORMING CONTRACTORS

Employees of outside contractors performing work at the Ragon Institute will be informed of any hazards that they might encounter from our operations prior to the beginning of the contract work. The PIs, floor managers, facility manager, and/or the Ragon EH&S office will provide outside contractors with the following information:

- Toxic and hazardous substances to which they may be exposed while on the Ragon Institute job site.
- Precautions the employees may need to take to reduce the possibility of exposure, such as use of appropriate protective equipment.
- The availability and location of appropriate SDSs.

The PIs, floor managers, facility manager, and/or the Ragon EH&S office will also be responsible for contacting each contractor before work is started within the Ragon property in order to gather and disseminate any information concerning chemical hazards that the contractor may be bringing into the Ragon Institute. Contractors will be required to provide appropriate SDSs for review and approval as a condition of use on Ragon property.

Contractors will be required to abide by the Ragon Institute safety and health policies or guidelines. Violations of any such agreed upon terms may be cause for termination of the work until the condition is corrected.