

Hazard Communication: Your Right-to-Know



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Before You Start, Be Safety Smart

Health and Safety at Florida State University

Department of Environmental Health & Safety (EH&S)

Florida State University takes very seriously the safety of everyone who lives, works or visits our campuses.

The Department of Environmental Health and Safety (EH&S) is dedicated to keeping you and our campus safe.

This module provides an overview of areas EH&S oversees, the services we provide and how we are fulfilling our mission to keep the FSU community safe. It also informs you of your right as an employee to be informed about any chemical or occupational hazards you may encounter while working at FSU and how to best protect yourselves and others.

EH&S accomplishes its mission to promote a safe and healthy environment for all members of the University community by:

1

Supporting the involvement of all faculty, staff and students in the success of our health and safety program.

2

Providing training that promotes healthy and safe behavior and practices as part of every classroom, laboratory and worksite.

3

Empowering each University community member to take charge of his/her own personal health.

4

Providing accessibility and guidance on health and safety regulations, procedures and standards and helping ensure ongoing compliance.

i Safety is everyone's responsibility. *If you See Something, Say Something!*

Observe an unsafe condition around campus? Notify your supervisor or EH&S. You can contact EH&S by phone or our [online reporting tool](#): "Report a Safety Concern or Near Miss Incident." This can be done anonymously.

Who We Are: EH&S Sections

I. Research Support and Environmental Compliance



Biological Safety oversees and provides training to Faculty, Staff and Students who work:

- In or around Biosafety Level 2 and above labs (BSL2+)



The **Chemical Safety** group provides Hazardous Communication/Right-to-Know and Hazardous Waste Awareness training



to ensure compliance with regulatory agencies.



Our **Radiation Safety** team conducts radiation safety training.

Other Primary Programs:

- Radiation and contamination surveys



Laboratory Safety provides general safety training to all lab workers (Laboratory Safety, Laboratory Manager Safety Presentation and Discussion, Anesthetic Gas Safety)

II. Risk and Insurance Services, Industrial Hygiene and Training



The **Risk Management Office** within EH&S seeks to eliminate, prevent, or minimize risks to which the University is exposed related to employee safety and potential losses of assets. Recognizing the



Industrial hygiene is the science and art of anticipating, recognizing, evaluating, and controlling workplace conditions that may cause worker injury, illness, or discomfort.

The EH&S **Industrial**



Training: EH&S provides training to employees whose job-specific functions have the potential to become hazardous or are



known to be hazardous. The objective of safety training

III. Building and Construction Safety



Our **Building Code Administration Section** ensures that all building erections, additions, alterations, repairs, remodeling or demolitions and all installations of building systems meet



The **Fire Safety** Section ensures the continuation of a fire-safe environment through inspection, education, equipment maintenance and resources for all Florida State

IV. National High Magnetic Field Laboratory (MagLab)



The National High Magnetic Field Laboratory or MagLab is the largest and highest-powered magnet laboratory in the world. Funded by the National Science Foundation and the State of Florida, each year

Hazard Communication: Your Right-to-Know



Hazard Communication Standard

Your Right-to-Know

The Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard (HCS), also known as the Right-to-Know Law, mandates employers to:


- Inform employees about hazardous chemicals and materials used in the workplace, where these are located and the potential effects they can have on employees' health and safety.
- Train employees on practices to safely work with chemicals and equipment to prevent risk of injury and illness related to these work resources, how to obtain additional information of the products they work with and how to safely store, use, and dispose of these products.

If your position requires the use of personal protective equipment (PPE) such as disposable gloves, safety goggles, lab coats, aprons, or hard hats, learn how to properly use the equipment and be consistent in using it. Find out where to locate and how to use such items as first aid kits, PPE, fume hoods, fire alarms and extinguishers. Ensure you know where exit stairs are located and your department's rally point, should an emergency necessitate building evacuation.

Always call for help with chemical spills, contamination, exposure concerns or other issues. If you have questions regarding work hazards, consult your department to see if any policies or procedures exist to address safety concerns. If you need additional information regarding work hazards, contact [EH&S](#) for guidance.

Labels

SAMPLE LABEL

CODE _____ Product Name _____	}	Product Identifier	Hazard Pictograms 
Company Name _____ Street Address _____ City _____ State _____ Postal Code _____ Country _____ Emergency Phone Number _____	}	Supplier Identification	Signal Word Danger

Keep container tightly closed. Store in a cool, well-ventilated place that is locked.
 Keep away from heat/sparks/open flame. No smoking.
 Only use non-sparking tools.
 Use explosion-proof electrical equipment.
 Take precautionary measures against static discharge.
 Ground and bond container and receiving equipment.
 Do not breathe vapors.
 Wear protective gloves.
 Do not eat, drink or smoke when using this product.
 Wash hands thoroughly after handling.
 Dispose of in accordance with local, regional, national, international regulations as specified.

In Case of Fire: use dry chemical (BC) or Carbon Dioxide (CO₂) fire extinguisher to extinguish.

First Aid
 If exposed call Poison Center.
 If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.

Precautionary Statements

Hazard Statements
 Highly flammable liquid and vapor.
 May cause liver and kidney damage.

Supplemental Information
Directions for Use

Fill weight: _____ Lot Number: _____
 Gross weight: _____ Fill Date: _____
 Expiration Date: _____

OSHA 3492-01R 2016

Remember: If you transfer a product to another container, it must be labeled with the product name and hazard identification.










Labels for a hazardous chemical must contain:

- Name, Address and Telephone Number
- Product Identifier
- Signal Word
- Hazard Statement(s)
- Precautionary Statement(s)
- Pictogram(s)

OSHA's updated hazardous chemical labeling requirements (HCS 29 CFR 1910.1200) now align with the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals (GHS). These changes help ensure improved quality and consistency in the classification and labeling of all chemicals and also improve worker comprehension. With better information available on the safe handling and use of hazardous chemicals, workers are able to avoid injuries and illnesses related to hazardous chemical exposures.

HCS Pictograms and Hazards

HCS Pictograms and Hazards

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

Note: The OSHA pictograms do not replace the diamond-shaped labels the U.S. Department of Transportation (DOT) requires for the

transport of chemicals.

Pictograms are graphic symbols used to communicate specific information about the hazards of a chemical. On hazardous chemicals being shipped or transported, the required pictograms consist of a red square frame with a black hazard symbol on a white background, sufficiently wide to be clearly visible. A square red frame *without* a hazard symbol is not permitted on the label.

Safety Data Sheets

Hazard Communication Safety Data Sheets

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products. The HCS requires new SDSs to be in a uniform format, and include the section numbers, the headings, and associated information under the headings below:

Section 1, Identification includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

Section 2, Hazard(s) identification includes all hazards regarding the chemical; required label elements.

Section 3, Composition/information on ingredients includes information on chemical ingredients; trade secret claims.

Section 4, First-aid measures includes important symptoms/effects, acute, delayed; required treatment.

Section 5, Fire-fighting measures lists suitable extinguishing techniques, equipment; chemical hazards from fire.

Section 6, Accidental release measures lists emergency procedures; protective equipment; proper methods of containment and cleanup.

Section 7, Handling and storage lists precautions for safe handling and storage, including incompatibilities.

(Continued on other side)

Hazard Communication Safety Data Sheets

Section 8, Exposure controls/personal protection lists OSHA's Permissible Exposure Limits (PELs); ACGIH Threshold Limit Values (TLVs); and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the SDS where available as well as appropriate engineering controls; personal protective equipment (PPE).

Section 9, Physical and chemical properties lists the chemical's characteristics.

Section 10, Stability and reactivity lists chemical stability and possibility of hazardous reactions.

Section 11, Toxicological information includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information*

Section 13, Disposal considerations*

Section 14, Transport information*

Section 15, Regulatory information*

Section 16, Other information, includes the date of preparation or last revision.

*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15 (29 CFR 1910.1200(g)(2)).

Employers must ensure that SDSs are readily accessible to employees.

See Appendix D of 29 CFR 1910.1200 for a detailed description of SDS contents.

At FSU you can access safety data sheets at safety.fsu.edu

Safety data sheets (SDS) are the source of detailed information on a particular hazardous chemical. The SDS includes information such as the properties of each chemical; the physical, health, and environmental hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical.

Employers must maintain copies of SDSs for all hazardous chemicals present in their workplaces.

Hazardous Waste Awareness

As an FSU employee, be responsible with what you are disposing.



Contact EH&S if the product you are disposing has any of the following hazardous characteristics:

- **Ignitable**
- **Corrosive**
- **Reactive**
- **Toxic**

Did you know FSU is a Large Quantity Generator of Hazardous Waste?

How do you know if the products you are ready to dispose of should be managed as hazardous waste?

*By definition a waste is considered hazardous if it poses a risk to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. **Call EH&S to assist.***

If you are a regular generator of hazardous waste, you will receive additional training from your supervisor and EH&S along with annual refresher training.

FSU's Stormwater Protection Program



Stormwater and Stormwater Runoff

Stormwater refers to the surface water resulting from rain. This water can either soak into the ground, evaporate to continue the water cycle, or run off to bodies of water.

Stormwater runoff results from rain flowing over land or impervious surfaces, such as paved streets, parking lots, and building rooftops, and does not soak into the ground. The runoff, as it flows over land or

impervious surfaces, picks up pollutants like trash, chemicals, oils, and dirt/sediment that can harm our rivers, streams, lakes, and coastal waters. To protect these resources, communities, construction companies, industries, and others, like FSU, use stormwater controls, known as best management practices (BMPs). These BMPs filter out pollutants and/or prevent pollution by controlling it at its source.

Illicit Discharge

An **illicit discharge** is any contaminant directly or indirectly allowed to enter the University's storm drain system that is not composed entirely of stormwater.

Surface drains not only prevent flooding in low lying areas on campus, FSU's Stormwater Protection Program also prevents the **illicit discharge** of chemical, physical, and biological pollutants into our stormwater conveyance systems which are directly linked to groundwater.



Storm Drain & Illicit Discharge

Examples of illicit discharge include sanitary waste water, septic tank effluent, improper disposal of oil, floor stripper, household and lawn toxins.

EPA studies have revealed pollutant levels from illicit discharges are high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health.

Remember: *"Only Rain Down the Drain"*

If you see any blocked drains or unusual discharge, please report it to FSU's Facilities Service Center at (850) 644-2424 or at "[Report a Safety Concern](#)". Do your part to help us keep the campus free of debris and trash while protecting our underground water resources.

Use of University Vehicles

University Policy

FSU Vehicles are exclusively for University business use. All other uses, such as going to lunch, running errands, or doing any other nonwork-related activity, are strictly prohibited. No Student may drive University-owned vehicles of any type, unless employed by the University and only while in the course and scope of assigned job duties. ***If you are involved in an accident in an FSU vehicle, while not in the course and scope of your job duties, you will be responsible for any damages.***

If your duties at FSU require you to drive a University vehicle, it is imperative you review the [University Policy](#) and consult your supervisor or contact EH&S for additional training requirements and information.

Think Safety!

- Plan route, time it will take to get there, allowing enough time to avoid rushing.
- Place loose items in trunk. They can become projectiles in an accident.
- Check tires, headlights, horn, windshield wipers and mirrors prior to starting vehicle.
- Always wear seatbelt.
- Always check before backing up.
- The use of tobacco is prohibited in FSU vehicles.
- No texting. It is illegal in Florida and other states.
- Turn on lights at sundown, in fog or while raining or overcast.

- If tired, stop and rest.

In an Accident while Conducting FSU Business?



-
1. Locate the laminated, white insurance card in the glove box of each FSU vehicle.

- 2. On Campus? Call FSU Police Department. Off campus? Call area Law Enforcement Agency.**
- 3. Notify your Supervisor. Your department will have the vehicle checked to determine if it is safe to drive.**
- 4. Notify EH&S to initiate claims process, even if accident occurred in a personal or rental vehicle.**
- 5. Never file an accident report online.**
- 6. Never admit fault or promise to pay anything.**
- 7. Do not discuss accident details with anyone except the investigating Law Enforcement Officer.**

Knowledge Check

How much do you know?

The primary sources at FSU for obtaining chemical information are the manufacturer's labels, Safety Data Sheets (SDS), your supervisor and EH&S.

☐

True

☐

False

SUBMIT

If you work in a FSU laboratory, this New Employee Orientation is the only training you will need.

☐

True

☐

False

SUBMIT

What do the five OSHA pictograms below mean? Drag each symbol description from the left column to match its appropriate meaning on the right .



Person's head and shoulders with starburst on chest.

Health Hazard: Carcinogen/
Reproductive/Respiratory/Target
Organ/Aspiration Toxicity.



Flame within flame underlined by black line.

Ignitable/Emits flammable gas/self-heating/self-reactive.



Liquid spilling onto a surface and a hand, damaging both.

Corrosion/Skin burns/Eye damage/Corrosive to metals.



Skull and Crossbones.

Poison/Acute toxicity.



Flame over circle.

Oxidizing gases/liquids/solids.

SUBMIT

It is acceptable to dispose of ***small*** amounts of paint thinner and other chemicals down the storm drains as long as the amount does not exceed half a gallon.

☐

True

☐

False

SUBMIT

If you are driving an FSU vehicle while performing your duties and it is time for lunch, it is fine to stop somewhere to eat on your way back to campus.

☐

True

☐

False

SUBMIT

Safety at FSU is the primary responsibility of:

☐

Environmental Health and Safety

☐

Florida State Police Department

☐

Everyone

SUBMIT

Before You Start, Be Safety Smart

Safety is everyone's responsibility! All employees, whether permanent or temporary, should be concerned with safety and should work as safely as possible. Making excuses for not working safely or trying to bypass safety rules and standards can cause injury to you or someone else.

Keep safety at the top of your mental checklist, no matter what task you are performing.

Environmental Health and Safety

(850) 644-6895

safety.fsu.edu