

HAZARD COMMUNICATION

Product Safety Program



Prepared By

Environmental, Health and Safety
EH&S

92 Campus Center Drive
South Portland, ME 04206

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FACTS YOU NEED TO KNOW

OSHA requires that employers afford their employees a safe work environment and provide a **Hazard Communication Program**. This program addresses potential risks that are associated with chemicals in the work place.

You have a *right to know and understand* what these risks are. All products we use at the college are safe if used correctly.

This product safety program has three things that you must do:

- Find out which products that you use have risks;
- Identify what those risks are; and
- Use the products safely.

There are two ways that you can find out the hazards of a product and how to use it correctly:

- Read the label; or
- Read the Safety Data Sheet (SDS) for the product.

Effective January 1, 2019 SMCC will no longer maintain paper SDS/MSDS binders. SDS binders found in classrooms are intended for training/educational purposes and will not be referenced in the event of an emergency.

The most current inventory of chemicals and SDSs are maintained electronically on the [MSDS Online](#) web portal. [MSDS Online](#) can be accessed from any computer through the [mySMCC](#) portal main page, following the Safety Data Sheet quick-link.

SMCC is required to train you in product safety when you are hired to the extent that your job requires it. We also must tell you how to use a product without harming yourself, especially when we provide you with a new product not used before. This includes safety equipment and clothing that you might need, also called personal protection equipment (PPE).

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REVISIONS

Revision 1	November 1, 1999
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SMCC employees are encouraged to comment on the Program and make suggestions for changes to:

SMCC Environmental Health and Safety
207-741-5932

1.0 INTRODUCTION

Southern Maine Community College (SMCC) provides safe and healthy campuses and this includes providing information and training on how to work safely with the many products we purchase for use on campus.

OSHA and the Maine Bureau of Labor Standards (BLS) require that we manage product safety. The SMCC Product Safety Program follows the OSHA Hazard Communication Standard. The standard can be referenced in the *Code of Federal Regulations at 29 CFR 1910.1200*.

The Program applies to faculty, staff, and work study students who may come into contact with chemicals and products containing chemicals.

Some chemicals are *not* included in the Product Safety Program. These items are also excluded in the federal rules. Many are things we bring to campus for personal use. They include:

- Tobacco products
- Food
- Medications
- Household products that are used at work in the same manner as at home
- Wood products
- Cosmetics

One of the goals of the Program is to begin reducing our use of hazardous products, to encourage you to buy only what product you actually need, and to find nonhazardous substitutes. This not only makes SMCC a safer place to work, it also reduces our impact on the environment.

DON'T SHY AWAY FROM ASKING FOR HELP

**UNDERSTAND THE RISKS ASSOCIATED WITH ANY
CHEMICAL USAGE**

USEFUL WEB SITES

[OSHA's Web Site For Product Safety](#)

SMCC's Safety [Data](#) Sheets can be found at [MSDS On-Line](#)

[The National Institute of Health](#) has hazard information for many common products. This allows searches by product type, product name, or ingredients.

2.0 PROGRAM MANAGEMENT

2.1 RESPONSIBILITIES

The EH&S Coordinator or appointed person(s) is in charge of managing the Hazardous Communication Program and providing training to staff.

Supervisors and department heads must follow the program in their areas. This includes knowing what products their departments have and training their staff and students in proper use.

Each SMCC employee is responsible for taking the following actions to avoid chemical hazards and personal injury:

- Find out which products that you use have risks;
- Identify what those risks are; and
- Use the products safely.

2.2 UPDATES

The EH&S Coordinator or appointed person(s) will review this program at least once a year and makes changes if needed. This will also be done if the rules change, someone is injured using a product, or new hazardous products or procedures are introduced.

2.3 AVAILABILITY

The Hazard Communication Program is available to anyone for review:

- In each department office;
- From the EH&S internal webpage; or
- By requesting an electronic copy from EH&S.

2.4 GLOBALLY HARMONIZED SYSTEM (GHS)

In 2012 OSHA changed its hazard communication rules to fit the Globally Harmonized System or GHS. GHS requires all countries to use the same system for labeling products and determining product hazards are.

CHANGES WITH THE GHS

Hazard Classification: GHS requires chemical manufacturers worldwide to use the same system for classifying health and physical hazards.

Household Products: Products sold for household use, *if used in the same manner as in the home*, are no longer covered.

Labels: Chemical makers will be required to simplify labels. This includes

- Using signal words with clear meaning such as “Danger” and “Warning”,
- Universal hazard symbols called pictograms , and
- Standard hazard statements in English.

Proper product use must be written in plain language.

MSDSs: These are now called *Safety Data Sheets (SDS)*.

3.0 CONTAINER LABELING 29 CFR 1910.1200(f)

Product labels are the first line of defense in the Product Safety Program.


The label provides what you need to know in order to use a product safely and be aware of its risks. *Appendix A* provides information on reading labels, and a list of common terms used is found in *Appendix B*.

3.1 MANUFACTURER’S LABELS










Under the GHS, a manufacturer’s labels must include, at minimum:

- a. Product identifier
- b. Signal word
- c. Hazard statement(s)
- d. Pictogram(s)
- e. Precautionary statement(s); and
- f. Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Chemicals received after June 1, 2015 are required to have a manufacturer's label that meets the GHS requirements. GHS simplifies labels by requiring use of standardized words, pictures, and hazard statements including environmental hazards. Here is what a GHS label may look like.

SAMPLE LABEL	
<p style="text-align: center;">PRODUCT IDENTIFIER</p> <p>CODE _____ Product Name _____</p> <p style="text-align: center;">SUPPLIER IDENTIFICATION</p> <p>Company Name _____ Street Address _____ City _____ State _____ Postal Code _____ Country _____ Emergency Phone Number _____</p> <p style="text-align: center;">PRECAUTIONARY STATEMENTS</p> <p>Keep container tightly closed. Store in 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 measure 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.</p>	<p style="text-align: center;">HAZARD PICTOGRAMS</p> <div style="text-align: center;"></div> <p style="text-align: center;">SIGNAL WORD Danger</p> <p style="text-align: center;">HAZARD STATEMENT</p> <p>Highly flammable liquid and vapor. May cause liver and kidney damage.</p> <p style="text-align: center;">SUPPLEMENTAL INFORMATION</p> <p>Directions for use</p> <p>_____ _____ _____</p> <p>Fill weight: _____ Lot Number _____</p> <p>Gross weight: _____ Fill Date: _____</p> <p>Expiration Date: _____</p>

The new GHS compliant labels use 9 pictograms to quickly identify the hazards of a product.

<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• Narcotic Effects• Respiratory Tract Irritant• Hazardous to Ozone Layer
<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</p>  <ul style="list-style-type: none">• Aquatic Toxicity• Soil Pollutant• Hazardous Air Pollutant	<p>Skull and Crossbones</p>  <ul style="list-style-type: none">• Acute Toxicity (fatal or toxic)

Each container received must be reviewed to verify that this information is present. Any materials received without the proper label should be reported to EH&S for follow-up with the manufacturer.

Containers that were received prior to 2015 are not required to have labels updated to meet the GHS standard as long as the manufacturers label is still legible and intact.

3.2 SECONDARY CONTAINER LABELS

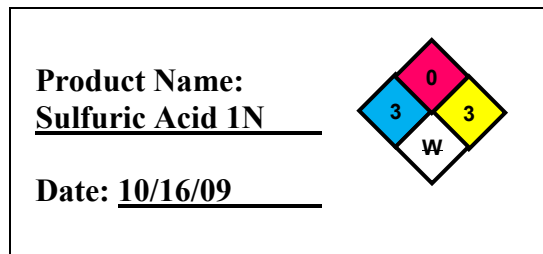
You might dilute a product and put it in a new container **or** pour it out of a larger container and put it in a smaller one for immediate use. Your new container, which is called a “**secondary container**”, must be labeled.

SMCC is allowed to generate our own labels which provide at least general information regarding the hazards of the chemicals. The information supplied on the secondary label must be consistent with the Safety Data Sheet.

Secondary containers at SMCC will be labeled with the following information:

- Product Name
- Date material waste placed into the secondary container
- NFPA Diamond completed with data obtained from the chemical's SDS

A sample of a label that SMCC uses for secondary containers looks like this:



If you are not able to locate blank secondary container labels or the NFPA details, contact EH&S for assistance.

The only time a secondary container does not need to be labeled is when the material is for the immediate and sole use of the employee who performs the transfer.

Containers shared by multiple employees, left at the end of the shift or class for next day, or otherwise left unattended must have the required secondary container label.

Secondary containers utilized in a laboratory setting will be labeled according to this document and requirements of the [Chemical Hygiene Plan](#).

All above ground storage tanks used for the storage of heating oil, kerosene, diesel fuel, and elevator hydraulic fluid will be labeled according to this document and the requirements of the SMCC Spill Pollution Control and Countermeasure (SPCC) Plan.

3.3 THE NFPA DIAMOND

The four-color symbol you see on the secondary label is known as the NFPA diamond. *This must appear on all secondary containers.* It was developed by the National Fire Protection Association (NFPA) as an easy way to recognize the hazards of a product (*Appendix C*). The colors on the NFPA diamond stand for specific hazards:



- The blue space refers to the product's health hazards;
- The red one tells you the level of fire hazard;
- The yellow one refers to the stability of the product;
- The white space is usually blank, but sometimes contains a specific symbol for certain types of hazards, for example "W" meaning "don't mix with water".
- The numbers go from "0", meaning no hazard, to "4" which indicates an extreme hazard.

4.0 SAFETY DATA SHEETS (SDS)

29 CFR 1910.1200(g)

A Safety Data Sheet, or SDS, provides vital information on the hazards associated with a product and its proper use.

4.1 WHAT SAFETY DATA SHEETS TELL YOU

Under GHS there is a standard format for SDSs which has the following sections:

- | | |
|----------------------------------------------|----------------------------------------------|
| 1. Identification of the substance | 9. Physical and chemical properties |
| 2. Hazards identification | 10. Stability and reactivity |
| 3. Composition | 11. Toxicological information |
| 4. First aid measures | 12. Ecological and environmental information |
| 5. Fire-fighting measures | 13. Disposal |
| 6. Accidental release measures | 14. Transport information |
| 7. Handling and storage | 15. Regulations |
| 8. Exposure controls and personal protection | 16. Other information |

Appendix D describes in more detail the GHS format for SDSs. *Appendix B* explains common terms used in them.

Some products are so similar that one SDS covers them all. Laboratory chemicals fit this category as do the many different brands of bleach or ammonia. In this case, a generic SDS may be substituted.

4.2 THE SMCC SAFETY DATA SHEET PROGRAM

OSHA requires that product SDSs be available close to point of use. For this reason all SDSs are available electronically, 24/7, via the school intranet. From the my.smccme.edu homepage scroll down to the Quick Link for Safety Data Sheets. Bookmark this link at your computer for quick future reference.

Effective January 1, 2019 SMCC will no longer maintain paper SDS/MSDS binders. SDS binders found in classrooms are intended for training/educational purposes and will not be referenced in the event of an emergency.

SMCC maintains a master library of SDSs for all chemicals and products employees use. The online database is backed up on a regular schedule. An archive of hardcopy SDS, prior to 2016, is maintained in the Fort Building.

If you can't find an SDS for a product that is in use, contact EH&S. **Any time you order a new product, check to be sure that it comes with an SDS and provide EH&S with a copy.**

5.0 INVENTORY OF HAZARDOUS SUBSTANCES

29 CFR 1910.1200(e)(1)(i)

5.1 WHAT IS A HAZARDOUS SUBSTANCE?

A substance is hazardous if it meets any one of these characteristics:

- **“Toxic”** means that a substance has an effect on health. This includes consequences such as blurred vision, dizziness, nausea, skin rashes, burns, and even death. Toxic effects can be “acute”, meaning they occur right away, or “chronic” meaning that effects gradually show up over time. A special type of toxic product is a “carcinogen”, one which causes cancer in the long term.
- **“Flammable”** is a label for products that produce a vapor in air that will ignite at normal temperatures. Gasoline is an example.
- **“Strong oxidizers”** refers to products that are explosive, unstable, or able to cause violent reactions, fires, or toxic vapors when mixed with common substances.
- **“Corrosive”** is products that gradually dissolve their way through materials including skin and internal organs if ingested. Acids and drain cleaners are examples of corrosive substances. Typically, corrosive products have a pH of 2.5 or less or 12.5 or greater.

5.2 HAZARDOUS SUBSTANCE INVENTORY

OSHA requires that we keep an up-to-date inventory of hazardous products to be sure that SMCC has a SDS for each. Annually, each Department or work group will perform a Chemical and Product Inventory. EH&S uses this data to maintain the on-line inventory of chemicals found at SMCC.

- EH&S will provide each Department will a list of chemicals in inventory for the prior year
- *Appendix E* provides details on how to perform the annual Chemical and Product Inventory
- *Appendix F* provides directions on how to access [MSDS Online](#) to view SDS, department specific chemicals and the SMCC Chemical Inventory

In general, any of the following, regardless of manufacturer or distributor, should be considered hazardous substances:

ALL OF THE FOLLOWING ARE HAZARDOUS SUBSTANCES

- All fuels including kerosene, gasoline, diesel, and heating oil;
- All compressed gases;
- All oil-based paints;
- All insecticides, weed killers, rodent killers, and like poisons;
- All aerosol cans containing flammables;
- Drain cleaners and oven cleaners;
- All furniture polishes;
- All varnishes and wood stains;
- Ammonia and bleach;
- All alcohols including denatured alcohol and rubbing alcohol;
- Etching compounds;
- Photographic and x-ray fixers and developers;
- All petroleum-based lubricants;
- All products containing petroleum distillates;
- Starting fluids;
- Brake, carburetor, fuel-injector, battery, and engine cleaners;
- All automotive fluids including windshield wash; and
- All fluorocarbon refrigerants

5.3 HAZARDOUS SUBSTANCES STORAGE

There are specific storage requirements for flammable, corrosive, and strongly reactive products.

HAZARDOUS PRODUCT STORAGE REQUIREMENTS

- **Flammables** - All flammable products must be stored in grounded yellow explosion-proof metal cabinets meeting the standard of 29 CFR 1910.106 and labeled “**FLAMMABLE – KEEP FIRE AWAY**”
- **Corrosives** - All corrosive products must be stored in blue wooden or plastic cabinets with powder-coated linings meeting NFPA Code 30 and labeled “**CAUTION - CORROSIVE**”
- **Strong Oxidizers** - All strong oxidizers must be stored in explosion-proof cabinets meeting the standard of NFPA 30 and labeled “**CAUTION – STRONG OXIDIZERS**”. Incompatible oxidizers may not be stored in the same cabinet even if on separate shelves.

6.0 CHEMICAL DONATIONS

Chemical donations by businesses and local intuitions are often well intended; however there may be unintended consequence for SMCC, such high disposal cost or increased regulatory compliance by accepting such chemicals.

SMCC will not accept donations of chemicals without review to ensure that the material:

- Is needed by the college for academic programs;
- Is useful to SMCC as donated;
- It is not past its shelf life; and
- Is not a hazardous waste.

Follow SMCC's procedure for approval of In-Kind Gifts (Donations). Details are located within the College Handbook portal of our My.smccme.edu intranet.

7.0 EMPLOYEE TRAINING 29 CFR 1910.1200(h)

All SMCC employees require training at time of hire via the [Safe Colleges](#) system. Two online modules comprise Hazard Communication or HazCom Training:

- Hazard Communication: Right to Understand (GHS)
- Safety Data Sheets

HAZCOM TRAINING REQUIREMENTS

The training covers the following topics:

- A summary of the requirements in the OSHA Hazard Communication Standard;
- The requirements of the SMCC Product Safety Program;
- How to access the Hazard Communication Program;
- How to read labels;
- Where to find SDSs;
- How to read an SDS to obtain to find a product's proper use and its hazards;
- Where they can get help on product safety when they need it; and
- The importance of selecting products that have minimal impact on people and the environment.

In addition to required hazard communication training, departments will provide training to their staff on how to work with commonly-used products. This training can be informal. Staff will be instructed on the product's physical and health effects and how to use these products safely, including:

- Safe work practices,
- Personal equipment to protect them from injury or health effects, and
- Emergency procedures.

Employees who work in a Laboratory (e.g. Biology, Chemistry, or Marine Science) must also follow training requirements outlined in SMCC's [Chemical Hygiene Program](#).

8.0 HAZARDS OF NON-ROUTINE TASKS

29 CFR 1910.1200(e)(1)(ii)

Rarely, SMCC may require staff to perform non-routine tasks that involve the use of hazardous products. SMCC allows use of hazardous products by staff for non-routine tasks only as a last resort, and they will never be used in a confined space.

It is up to department heads to decide if a task is non-routine and what products, PPE, and procedures will be used. The department must request an EH&S review of the non-routine task for staff safety and OSHA compliance. Final approval rests with the Dean of Administration, following the EH&S review.

If the non-routine task is approved, the department must provide the staff conducting the task with information about the product before staff begin work. This information will include:

- Specific hazards involved;
- Protective measures the employee should take; and
- Measures to lessen the hazard, including ventilation, respirators, presence of another employee, and emergency procedures.

9.0 INFORMING CONTRACTORS

29CFR 1910.1200(e)(2)

Contractors are frequently hired to do work at SMCC. They may work in areas where we use and store hazardous products or may bring such products to campus for their work.

For contractor working in places where we have hazardous products, EH&S, working with the Dean of Administration and the Facilities and Project Manager, will provide contractors with the following information:

- Toxic and hazardous substances to which the contractor's employees may be exposed while at the worksite;
- Precautions their employees can take to lessen the possibility of exposure; and
- How to access SDSs.

For hazardous products that contractors bring with them, the Dean of Administration will require the contractor to get in touch with the EH&S Department to provide SDSs and information concerning chemical hazards that the contractor is bringing into our workplace. This information will be disseminated to departments with staff who could come into contact with hazardous products the contractor will use. Departments will see to it that staff who might be exposed to these hazards are properly trained and protected.