

# Hazardous Communications Program



Developed by EH&S



# Objectives



To gain a basic understanding of:

1. Why the Hazard Communication (HazCom) Standard was created
2. The 5 elements of the HazCom Standard
3. How to understand data on a Safety Data Sheet (SDS)
4. How to report Chemical Concerns



# Purpose of a HazCom Program



- Reduce injuries and illnesses caused by chemical hazards in the workplace
- Identify and evaluate chemical hazards
- Establish uniform requirements for communicating information about chemical hazards to all workers
- Establish means of reporting



# The HazCom Standard Protects Workers



- To comply with the Maryland Department of Labor regulations, SMCM recognizes Maryland Occupational Safety & Health (MOSH) regulations
- MOSH HazCom standard requires SMCM to protect it's workers from the dangers of hazardous materials in the workplace. To protect you, this training has been developed to cover the basics of the campus program



# General Duty Clause



- 5(a)(1) of the Occupational Safety and Health Act requires an employer to furnish it's employees"
  - "employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to its employees..."



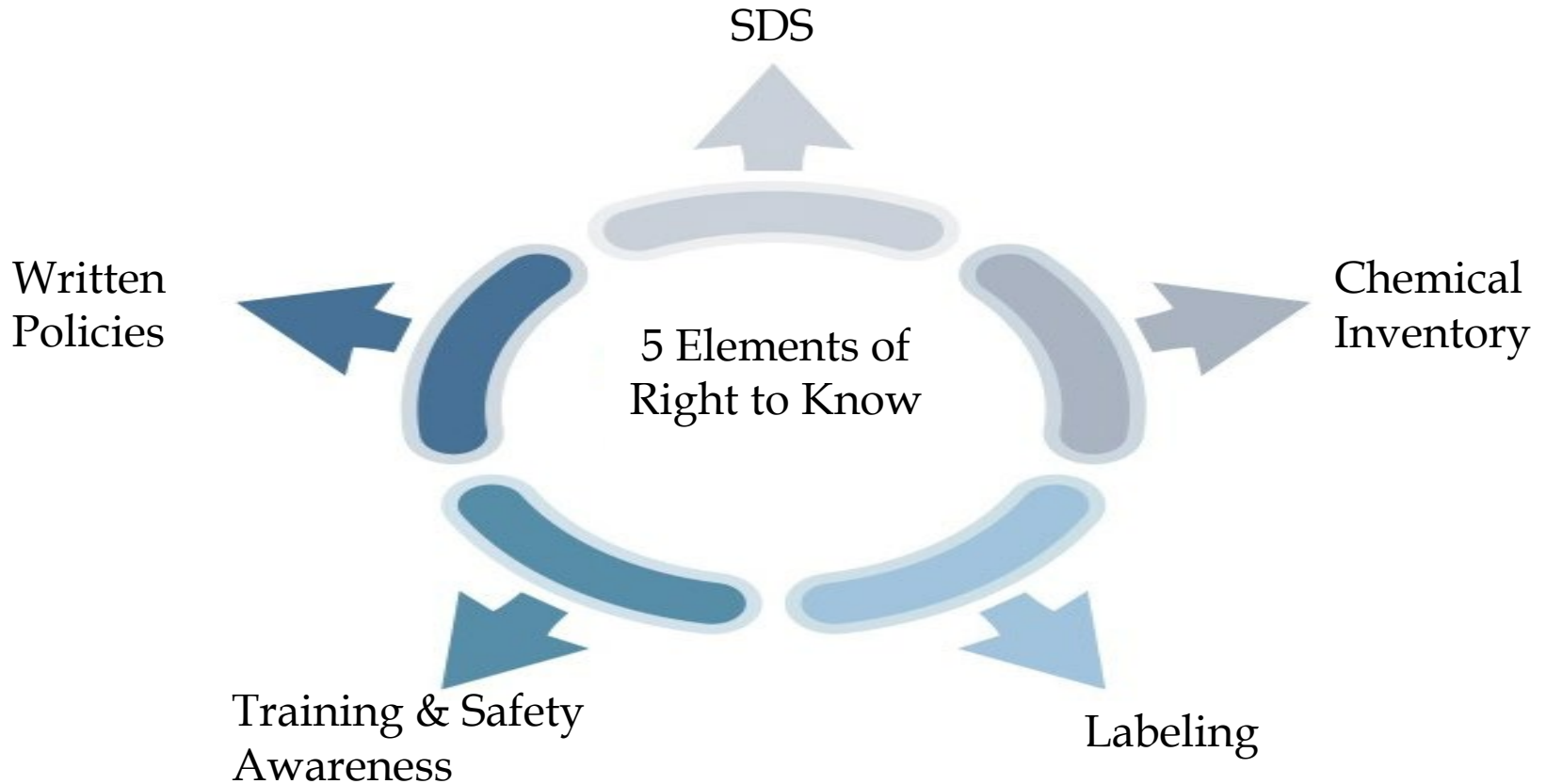
# Written Policy



- SMCM has developed a written Hazardous Communication Program that is available to be viewed by all employees
- Your supervisor/ Lab coordinator should keep a copy of the chemical inventory list tailored to your specific work area
- The overall coordination of the program for SMCM will be handled by the EH&S Manager



# Your “Right To Know”





# Define Chemical(s)



- The definition of hazardous chemicals includes physical hazards such as compressed oxidizers, carcinogens, irritants, corrosives, sensitizers, and agents. Products such as paints, glues, cleaning solutions, floor cleaners and many other commonly found substances are considered hazardous chemicals under the Employee Right to Know Law.





# Hazardous Substance Inventory



- SMCM will maintain both a Master Inventory list and a Department Inventory list
- The Master list will be maintained by the EH&S Manager
- Each department is required to maintain an up to date list within their department



Hazard Type	Hazard	Common Related Tasks
Impact	Flying objects such as large chips, fragments, particles, sand, and dirt	Chipping, grinding, machining, masonry work, wood working, sawing, drilling, riveting, sanding
Heat	Anything emitting extreme heat	Furnace operations, pouring, casting, hot dipping, welding
Chemicals	Splash, fumes, vapors, and irritating mists	Acid and chemical handling, degreasing, plating, working with blood
Dust	Harmful dust	Woodworking, buffing, general dusty conditions
Optical Radiation	Radiant energy, glare, and intense light	Welding, torch-cutting, brazing, soldering, laser work



# Personal Protective Equipment



## Training and Qualification

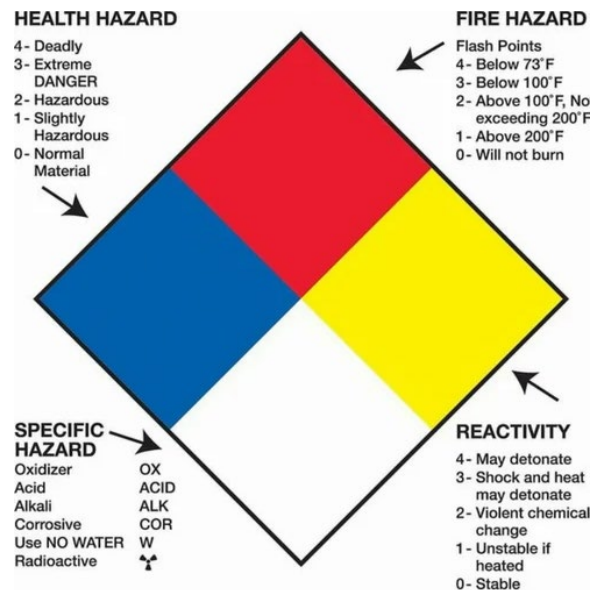
1910.132(f) states: Employees shall be trained to know at least the following:

- When PPE is necessary
- What PPE is necessary
- How to properly don, doff, adjust, and wear PPE
- The limitations of PPE
- The proper care, maintenance, useful life, and disposal of PPE

\*SMCM EH&S has a PPE training, please ask if you need to review\*



# Labels and SDS's





# Contents of the SDS

## Everything you need to know about a chemical



### Safety Data Sheet Contents

Section 1 - Identification

Section 2 - Hazard(s) identification

Section 3 - Composition/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/PPE

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, date












# What does the SDS look like?



- Example: Clorox Bleach  
<https://www.thecloroxcompany.com/wp-content/uploads/cloroxregular-bleach12015-06-12.pdf>
- <https://www.thecloroxcompany.com/wp-content/uploads/cloroxregular-bleach12015-06-12.pdf>

# SDS Pictograms

<p><b>Health hazard</b></p>  <ul style="list-style-type: none"> <li>• Carcinogen</li> <li>• Mutagenicity</li> <li>• Reproductive toxicity</li> <li>• Respiratory sensitizer</li> <li>• Target organ toxicity</li> <li>• Aspiration toxicity</li> </ul>	<p><b>Flame</b></p>  <ul style="list-style-type: none"> <li>• Flammables</li> <li>• Pyrophorics</li> <li>• Self-heating</li> <li>• Emits flammable gas</li> <li>• Self-reactives</li> <li>• Organic peroxides</li> </ul>	<p><b>Exclamation mark</b></p>  <ul style="list-style-type: none"> <li>• Irritant (skin and eye)</li> <li>• Skin sensitizer</li> <li>• Acute toxicity (harmful)</li> <li>• Narcotic effects</li> <li>• Respiratory tract irritant</li> <li>• Hazardous to ozone layer (non-mandatory)</li> </ul>
<p><b>Gas cylinder</b></p>  <ul style="list-style-type: none"> <li>• Gases under pressure</li> </ul>	<p><b>Corrosion</b></p>  <ul style="list-style-type: none"> <li>• Skin corrosion / burns</li> <li>• Eye damage</li> <li>• Corrosive to metals</li> </ul>	<p><b>Exploding bomb</b></p>  <ul style="list-style-type: none"> <li>• Explosives</li> <li>• Self-reactives</li> <li>• Organic peroxides</li> </ul>
<p><b>Flame over circle</b></p>  <ul style="list-style-type: none"> <li>• Oxidizers</li> </ul>	<p><b>Environment (Non-Mandatory)</b></p>  <ul style="list-style-type: none"> <li>• Aquatic toxicity</li> </ul>	<p><b>Skull and crossbones</b></p>  <ul style="list-style-type: none"> <li>• Acute toxicity (fatal or toxic)</li> </ul>



# Always consult the SDS



- Read the SDS for any chemical you use BEFORE handling, so you are familiar with the chemical's properties and prepared for anything unplanned
- In the case of a spill, contact with skin, fire, etc. consult the SDS to learn how to handle the situation properly based off the chemical's needs



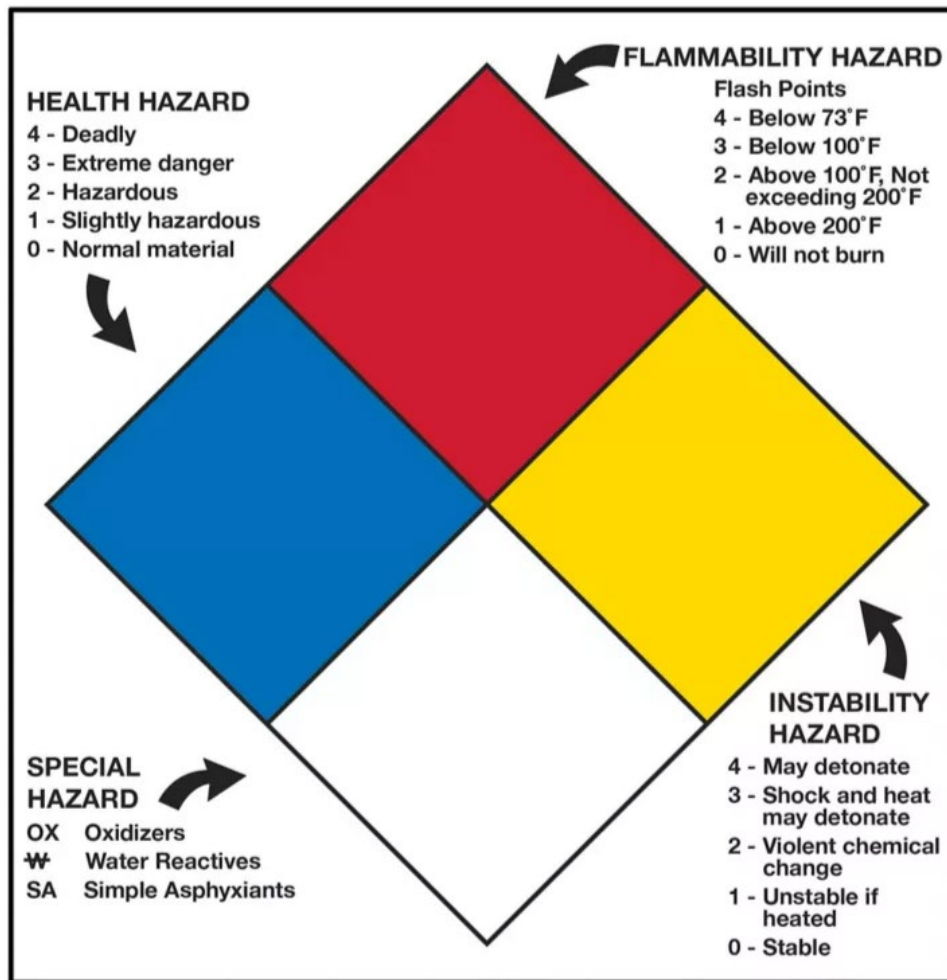


# Fun Fact!



- While all Safety Data Sheets are maintained by Departments and EH&S, all Safety Data Sheets are also available online.
- Let's say you're in the field and working with a new chemical. Take out your phone and search "*chemical name* SDS". The full SDS card will be there!

# Other Labels commonly on chemicals: National Fire Protection Association Diamond (NFPA)





# NFPA Diamonds



- Do not provide specific chemical names, quantities, or locations
- Their purpose is to give emergency personnel a general idea of the hazards present in the building or area



# Labels on New Containers

- NEVER remove the manufacturer's label on a chemical.
- The label includes vital information
  - Product Identity
  - Hazard warnings
  - Manufacturer's name and address





# Transferring to Secondary Containers



- All secondary containers **MUST BE LABELLED**
- Example of what a secondary label should look like:

Chemical or Product Name		<input type="checkbox"/> Non-hazardous <input type="checkbox"/> Corrosive <input type="checkbox"/> Flammable <input type="checkbox"/> Reactive <input type="checkbox"/> Toxic <input type="checkbox"/> Oxidizer <input type="checkbox"/> Health Hazard <input type="checkbox"/> Other (explain)
Chemical Composition		
	%	
Name of Preparer	Date	



# How to report an incident

Appendix D. Laboratory Hazards/Hazard Assessment  
St. Mary's College of Maryland  
Department of \_\_\_\_\_  
Today's Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

**Incident Report Form**  
*To be filled out within 24 hours of incident*

This form is to be used for individuals involved in an incident on campus. Employees must notify their supervisor.

\_\_\_\_\_  
 Incident occurred performing duties required of a student  
 Incident occurred performing duties required of a student **employee**  
 Name: \_\_\_\_\_ DOB \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Course: \_\_\_\_\_  
 Incident Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_:\_\_\_\_ AM or PM (circle one)  
 Location: Room: \_\_\_\_\_ Exact Area: \_\_\_\_\_  
 Witnesses: \_\_\_\_\_  
 Description of Incident: \_\_\_\_\_  
 \_\_\_\_\_  
 Root Cause – be specific: \_\_\_\_\_  
 Contributing Factors (ie. weather, lack of training): \_\_\_\_\_  
 What Corrective Measures could be taken: \_\_\_\_\_  
 \_\_\_\_\_

**Medical Treatment**  
 No treatment  First aid only at location, treatment (describe) \_\_\_\_\_  
 Medical (indicate medical care provider/clinic) \_\_\_\_\_  
 Other (describe) \_\_\_\_\_

\_\_\_\_\_  
**Student Signature:** \_\_\_\_\_  
 Supervisor/Instructor (please print): \_\_\_\_\_ Phone: \_\_\_\_\_  
 Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

- Each department has copies of this incident reporting form
- Fill out the form, send it to your supervisor, supervisor will send it to EH&S
- Incident Reports are not meant to get anyone in trouble! They are meant to make us aware of an issue so we can fix it and prevent further incidents



# Examples of Incidents to Report



- Contact with skin, eyes, burns– any and all injuries!
- Spill
- Fire
- Explosion

\*If you are questioning whether an incident is too small to report, REPORT ANYWAY! \*



# Link to HazCom Policy



- Available to view at any time on SMCM EH&S webpage: