

GHS Updates & Hazcom 2020

High Risk Safety Meeting –Hazmat departments on UL Lafayette Campus

OSHA has implemented a new Globally Harmonized System (GHS), which took effect at the end 2013. Basic information on the changes to our current Hazardous Communication program to conform to the new GHS standards are outlined on this handout, which will serve as your High-Risk Safety meeting for the first quarter 2020.

GHS System:

The Globally Harmonized System (GHS) is an international approach to hazard communication, providing agreed criteria for classification of chemical hazards, and a standardized approach to label elements and safety data sheets. It is based on major existing systems around the world, including OSHA's Hazard Communication Standard and the chemical classification and labeling systems of other US agencies.

Changes to the Standard:

- Hazard classification: The hazard definitions have been changed to provide specific criteria for classification of health and physical hazards, as well as classification of mixtures. These specific criteria will help to ensure that evaluations of hazardous effects are consistent across manufacturers, and that labels and safety data sheets are more accurate as a result.
- Labels: Chemical manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statements must also be provided.
- Safety Data Sheets (SDS): Will now have a specified 16-section format. **SDS can be obtained electronically from the Cameo Chemicals database, which can be downloaded, from the UL Lafayette Software Center.**

Labeling Elements Changes:

- Pictogram: 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. Each pictogram consists of a different symbol on a white background within a red square frame set on a point (i.e. a red diamond). There are nine pictograms under the GHS. However, only eight pictograms are required under the Hazard Communications Standard.
- Signal words: a single word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for less severe hazards.
- Hazard Statement: a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.
- Precautionary Statement: a phrase that describes recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling of a hazardous chemical.
- Supplier Information: the name, address and telephone number of the manufacturer or supplier.



Hazard Communication

Commonly known as HazCom, Hazard Communication policies and programs help protect employees from the dangers of hazardous chemicals. They inform employees of:

- The right to know which chemicals are being used in the workplace
- The possible dangers that they could be exposed to
- How to protect themselves when using hazardous chemicals

A hazardous chemical is any chemical that is classified as a physical hazard or a health hazard, such as: simple asphyxiant, combustible dust, pyrophoric (“instantly igniting”) gas, or any other hazard not otherwise classified in the group.

- Physical hazard - Chemical that can cause a fire, explosion, or some other violent reaction when it encounters air, water, or other chemicals.
- Health hazard - Chemical that is harmful to people’s health by entering the body in one of three ways - inhalation, skin contact, or ingestion.
 - These types of chemicals may:
 - cause short-term (acute) health problems and/or long-term (chronic) health problems;
 - be toxic;
 - be corrosive to the skin or eyes;
 - be a respiratory sensitizer;
 - cause cancer, birth defects, or reproductive issues;
 - attack specific organs in the body; or
 - be harmful or deadly when inhaled.

The HazCom policies shall require agencies to comply with the following five requirements:

- Develop a written HazCom program that describes how the program will be implemented
- Identify and create an inventory of all hazardous chemicals at the workplace
- Ensure each chemical container is properly labeled with a commonly acceptable workplace label
- Ensure each chemical has a safety data sheet, or SDS, that is easily accessible to all employees who work with that chemical
- Create and implement an employee HazCom training program

Hazard Communication begins at the chemical manufacturing plant. Chemists classify and categorize each chemical based on its hazards. From this information the chemical’s safety data sheet and label are created.

Chemical Inventory: When a chemical arrives at the workplace, the hazard information is passed along so it can be added to the agency’s chemical inventory. Each agency shall keep a complete and up-to-date inventory of all its hazardous chemicals and submit to the EH&S office annually.

- The safety data sheet explains what you need to know to safely work with a chemical. Most safety data sheets will have a 16-section format and include certain types of information in each section. This standard format helps ensure that all employers and employees understand the chemical, its hazards, and the precautions the user must take to stay safe.
- Safety data sheets must be readily accessible to employees, in their work area, at all times.
- The safety data sheet is not the only source of information. Each hazardous chemical must be labeled with the chemical name and other vital, quick-reference information. The label is not intended to be the sole source of safety and hazard information, but rather serves as an immediate warning to the user.

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- Typically, there are six label elements: Product identifier or ingredient disclosure; Signal word; Hazard statement; Pictograms; Precautionary statement; and Supplier identification.
 - Pictograms are always a black symbol shown on a white background and surrounded by a red, diamond-shaped border. These images are used to depict the physical, health, or environmental hazards caused by a particular chemical. They are meant to be an immediate, graphic warning.
 - The information on the label must be linked back to the safety data sheet and chemical inventory.
- The chemical inventory, safety data sheets, and labels are critical when it comes to working safely with hazardous chemicals, but what brings it all together is the training and information your agency is required to provide to you.
- The HazCom program shall ensure that each person who works with hazardous chemicals is trained on:
 - HazCom policy requirements;
 - Places where hazardous chemicals are in the workplace;
 - Location and availability of the chemical inventory, safety data sheets, written HazCom program, and how to read safety data sheets and labels; and
 - The in-house labeling system your agency uses, if applicable.
- The purpose of the written HazCom program is to document, in detail, the employer's plans for communicating the hazards involved with using the chemicals in the workplace.
 - Employees have the right to review the written HazCom program whenever they choose to, so that they can see what their employer is doing to keep workers knowledgeable and safe.