

ESSENTIAL 29: GHS Hazcom – Hazard Communication



Key Takeaways:

- Understanding the purpose and importance of a hazard communication program
- Comprehending common physical and health hazards associated with hazardous chemicals
- Observing chemicals and their hazards, through labeling, markings, pictograms, and warning practices
- Learning the purpose and components of a Safety Data Sheet

Course Description

OSHA estimates that the Globally Harmonized System (GHS) covers over 43 million workers who produce or handle hazardous chemicals in more than 5 million workplaces across the country. Annually, the GHS prevents over 500 estimated workplace injuries and illnesses and 43 fatalities, and thus results in cost savings to American businesses of more than \$475 million in productivity improvements, fewer safety data sheet and label updates, and simpler new hazard communication training.

The Globally Harmonized System (GHS) standardizes how we communicate about chemical hazards in the workplace. As well, OSHA has adapted its Hazard Communication Standard to align with the globally harmonized system.

Hazard Communication Standard

It's organized into these categories of physical hazards:

- Flammables
- Explosives
- Reactives
- Corrosives
- Oxidizers
- Gases under pressure

Every industrial businesses is required to have a written hazard communication program and to provide workers with additional training regarding site-specific chemicals.

Effective hazard communication programs must consist of three key areas:

Chemical Inventories and Safety Data Sheets (SDS)

- Always record updated inventory of the hazardous chemicals present at the workplace.
- Every hazardous chemical needs to have a Safety Data Sheet (SDS).
- Safety Data Sheets need to communicate required information and be easily understandable and accessible.

Labels and Warnings

- Signal chemicals and their hazards through labels and warning information.

Hazard Communication Training

- Further improves safety practices through a hazard communication training program.
- Teaches employees the hazards of non-routine tasks.

Safety Data Sheets (SDS)

- The best source of information about a hazardous chemical is the SDS, a technical bulletin of the chemical's hazards. OSHA standards ensure that the information is consistent between manufacturers. By federal law, both chemical manufacturers and distributors are required to furnish SDSs for hazardous products and OSHA requires employers to make them easily available to workers.

An example of safe handling precautions for hazardous chemicals is general hygiene (i.e. no eating and drinking in the work areas). Safe storage conditions include practices such as ventilation needs, storage room designs and packaging requirements.

In the case that an employee is assigned to respond to accidents and spills, it is especially important that these workers are trained in related responsibilities and properly equipped – and part of being properly equipped is to have easy access to the Safety Data Sheet collection.

Employees are responsible for always reading the SDS prior to working with any new chemical. OSHA standards ensure that SDSs are readily available during all work shifts, for every employee. It is possible that your facility keeps SDS binders in a central location, or has electronic SDSs and provides access through computer terminals. Every safety professional needs to know where SDSs are located and make this location plain to the workforce.

A company might allow cleanup of small amounts of specific chemicals by people who are not part of a qualified spill response team. Although, only trained and properly equipped individuals who have access to spill response kits should clean up spills, even the smallest of them.

The Hazard Communication Standard necessitate pictograms on manufacturer and supplier labels of chemical containers as warnings of potential hazards of exposure. Pictograms are part of the globally harmonized symbols and each represents a distinct hazard. Supplementary to the original manufacturers' label, employers are allowed to use in-house labels, sometimes referred to as secondary labels. Although, it is worth knowing that these labels must meet the Hazard Communication Standard requirements.

The Workplace Hazardous Material Information System and the National Fire Protection Association offer allowed alternative labeling systems and are often used for workplace containers. In the case that an in-house label is used on a container already labeled by the manufacturer, it is an addition and must not block out any of the manufacturer's label.

When your facility implements optional in-house labels, you need to understand the labels' coding and information.

Best practices for employers:

- It is crucial that employers review the new SDSs in a timely fashion upon receipt.
- In the case that the employer does not receive the SDSs in a timely fashion, they should promptly communicate with the manufacturer to obtain the SDSs.
- Continuously, employers should evaluate the workplace using the SDSs to identify hazardous chemicals and how their employees may be exposed.
- When employees work with or around hazardous chemicals, their employers must make sure that employees review the updated SDSs and assess each of the employer's underlying compliance programs (e.g., emergency action plan, storage of flammable and combustible materials, PPE, respiratory protection, etc.) that may be impacted by the SDSs.
- It is a good idea for employers to ensure that employees who work with or around hazardous chemicals are trained to recognize the pictograms and hazard warnings that will be required under the new Hazard Communication Standard. As well, employers should document this training and develop mechanisms to guarantee that employees understand the hazards of working with or around hazardous chemicals.