

Hazard Communication

Toolbox Talk

Your Right to Know About Chemical Hazards in the Workplace – Hazard Communication Overview

There are an estimated 575,000 chemical products used, imported, or produced in the United States. Therefore, Americans are exposed to chemicals daily.

Hazardous chemical exposure can cause, or contribute to many serious health effects such as heart disease, kidney and lung damage, sterility, cancer, burns, and skin rashes. Some chemicals may also be safety hazards and have the potential to cause fire, explosions, and other serious accidents. Exposure to chemicals poses a serious problem for both employers and their workers.

The Occupational Safety and Health Administration ensures that the hazards of all chemicals produced or imported are evaluated and that all information concerning their hazards is transmitted to employers and employees. This transmittal of information is generally accomplished by implementing a comprehensive Hazard Communication (HazCom) program which includes container labeling and other forms of warning, safety data sheets (SDS's), and employee training.

HazCom is referred to as the "Right to Know" standard, which establishes uniform requirements to make sure the hazards of all chemicals in the workplace are evaluated and the information is passed on to affected workers. The program also ensures that all employers receive the information they need to be able to inform and train their employees properly and to design and implement employee protective programs.



Chemical Manufacturers Must:

- Determine the hazards of each product; and
- Communicate information to customers through labels and SDS's.

Employers Must:

- Identify and list chemicals in the workplace;
- Obtain SDS's and labels for each chemical; and
- Develop written programs that include chemical lists, labels, SDS's, personal protective equipment (PPE), and employee training.

Employees Must:

- Comply with all elements of the HazCom program set out by their employer by following the warnings and cautions on SDS's and on chemical labels; and
- Wear and maintain required PPE



Employee Training

Employee training plans should include both general and site-specific information, such as:

- How the HazCom program is implemented;
- Hazards of the chemicals in the area;
- Measures employees can take to protect themselves;
- Location and use of PPE, if required; and
- Methods and observations workers can use to detect the presence of a chemical.



Labels and Warnings

Each container must be labeled, tagged, or otherwise marked with the identity of the chemical contained and must show the appropriate hazard warnings associated with that chemical. These labels must be legible, in English, and prominently displayed on the container.

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Safety Data Sheets (SDS)

Chemical manufacturers must develop a SDS (formerly known as material safety data sheet, or MSDS) for every chemical they produce. This SDS must be automatically provided at the time of the initial shipment of the product, must be in English, and must include information regarding the chemical identity.

The chemical's characteristics, both physical and chemical; known acute and chronic health effects and related health information; exposure limits; whether the chemical is considered to be a carcinogen; precautionary measures; emergency and first-aid procedures; and the identification of the organization that prepared the SDS must be stated on this document.



Sections of the Safety Data Sheet

The SDS (Safety Data Sheet) contains all the important information you need to know about the chemical you're using, its health effects, and how to handle it safely.

Section 1, Identification: Includes product identifier; manufacturer or distributor contact information; emergency phone number; recommended use; and restrictions on use.

Section 2, Hazard(s) identification: Includes all hazards regarding the chemical and required label elements.

Section 3, Composition/information on ingredients: Includes information on chemical ingredients and trade secret claims.

Section 4, First-aid measures: Includes important symptoms and/or effects, including acute or delayed and required treatment.

Section 5, Fire-fighting measures: Lists suitable extinguishing techniques and equipment and 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.

Section 8, Exposure controls/personal protection: Lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; and personal protective equipment.

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 including acute and chronic effects; and 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.

Summary

A HazCom program ensures that employees are aware of the chemicals in the workplace, and each employee, whether they work near chemicals directly or indirectly, must become familiar with the HazCom program.

