

Introduction

About 32 million workers are potentially exposed to one or more chemical hazards. There are an estimated 575,000 existing chemical products and hundreds of new ones are being introduced annually. This variety poses a serious problem for exposed workers and their employers. Chemical exposure may cause or contribute to many serious health effects such as heart ailments, kidney and lung damage, sterility, cancer, burns and rashes. Some chemicals may also be safety hazards and have the potential to cause fires, explosions and other serious accidents.

Because of the seriousness of these safety and health problems, and because many employers know little or nothing about them, the Occupational Safety and Health Administration (OSHA) issued a rule called Hazard Communication. The basic goal of Hazard Communication is to be sure that employers and employees know about chemical hazards and how to protect themselves. This knowledge, in turn, will help to reduce the incidence of chemical-related illnesses and injuries.

Responsibilities Under the Hazard Communication Standard – GHS Compliant

The hazard communication standard requires a “downstream flow of information” from the manufacturer, employer, down through the employees who use the chemicals. The manufacturers of the chemical must generate and disseminate the information while the users must obtain the information and transmit it to their own employees. The following information reviews these responsibilities.

<i>Chemical Manufacturers & Importers</i>	<ul style="list-style-type: none"> Determine the hazards of each product
<i>Chemical Manufacturers, Importers & Distributors</i>	<ul style="list-style-type: none"> Communicate the hazards of information and associated measures downstream to customers through labels and Safety Data Sheet (SDSs)
<i>Employers</i>	<ul style="list-style-type: none"> Identify and list chemicals in their workplace Obtain SDSs and labels for each hazardous chemical Develop and implement a written hazard communication program Communicate hazard information to their employees through labels, SDS and formal training programs

We are mainly concerned with employer/employee responsibilities. We will discuss each of these responsibilities. It is up to each employer to determine the most suitable Hazard Communication program for his or her company.

A list of hazardous chemicals in the workplace is the first part of the written Hazard Communication program. This list will serve as an inventory of everything for which an SDS must be maintained.

SDSs must be “readily available” to all employees on all shifts. This means they cannot be kept in an office which may be locked. SDSs can be organized in three-ring notebooks that are kept in some other accessible area.

The standard OSHA SDS Form will be used. This information must be in English. Additional languages may be used, and are optional. An SDS should specify:

- Chemical's identity
- Both its chemical and common name
- Physical and chemical characteristics
- Physical and health hazards
- Primary routes of entry
- OSHA permissible exposure limit (PEL)
- ACGIH Threshold Limit Value (TLV) and any other exposure limits
- Its carcinogenicity
- Safe handling procedures, control measures, and emergency first-aid procedures
- The date the SDS was prepared or updated
- Name, address and telephone number of the chemical manufacturer, importer, employer or party responsible for preparing or distributing the SDS

There may be no blank sections on an SDS. If information hasn't been provided, a note should be made on this section of the SDS stating that the information is unavailable. A letter requesting this information should be sent to the manufacturer and a copy maintained with the SDS until the requested information arrives.

Employers are not required to test a particular chemical if the information is not available, but may if they want to. If the specific chemical identity is a bona fide trade secret, the identity for that substance is not required on the SDS. However, appropriate hazard warning and precaution information must be relayed. If it is not a bona fide trade secret, the specific chemical identity must be filled in. The key here is bona fide, and OSHA will judge if a company has a legitimate claim to a trade secret.

The following is a brief discussion of each section of that SDS.

Section 1, Identification includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

Section 2, Hazard(s) identification includes all hazards regarding the chemical; required label elements.

Section 3, Composition/information on ingredients includes information on chemical ingredients; trade secret claims.

Section 4, First-aid measures includes important symptoms/ effects, acute, delayed; required treatment.

Section 5, Fire-fighting measures lists suitable extinguishing techniques, equipment; 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; personal protective equipment (PPE).

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, acute and chronic effects; 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.

*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15(29 CFR 1910.1200(g)(2)).

Always remember, if you are unsure about a chemical or have ANY questions about handling, ask your manager or supervisor.