Hazard Communication Compliance

YOUR GUIDE TO DEVELOPING AND MAINTAINING A HAZCOM PROGRAM

J. J. Keller & Associates, Inc.®
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Where to begin

This publication takes you beyond the regulation itself and provides you with information on how to comply with and implement the Hazard Communication Standard, as well as providing relevant information based on OSHA's own guidance and interpretations.

Used in conjunction with the OSHA regulation, this publication serves as an effective guide to implementing a hazard communication program in your workplace.

As you use the publication, consider the following as your roadmap.

Introduction

Complying with OSHA regulations is a daunting task, particularly for employers whose workers may be exposed to hazardous chemicals. This publication provides a comprehensive approach to OSHA's Hazard Communication Standard, and assists those tasked with implementing a HazCom program in the workplace.

As you use the publication, consider the following as your roadmap.

Getting started with Hazard Communication

- **Learn the standard**. This publication addresses employer responsibilities under the HazCom standard. Many of the provisions of the standard apply only to chemical manufacturers, importers, or distributors. This publication will focus on assisting employers that only use but do not produce chemicals, in order to help them to develop and implement an effective hazard communication program. **Note**: This publication is focused on federal OSHA requirements; some states, such as California, Oregon, Washington, Michigan, and Minnesota, have their own approved state OSHA requirements which take precedence over federal OSHA.
  - In order to understand the requirements of the HazCom standard, you should have a familiarity with the standard.
  - The Appendices to the standard contain specific details on hazard classification, required label elements, etc.
- **Prepare and implement a written plan** which describes how you will comply with the various parts of the HazCom standard, including a list of hazardous chemicals used, who is responsible for obtaining missing safety data sheets, the HazCom training provided to employees, the type of labeling system used, where safety data sheets are kept, and so on. See the **sample written plan template** in the written plan section of this book.
- **Label containers** of hazardous materials in the workplace and keep labels on shipped containers. A label must be on the immediate container of every hazardous chemical. Shipped containers should arrive at your facility already properly labeled.
- **Maintain Safety Data Sheets (SDSs)** for each hazardous chemical in the workplace. Make sure that current SDSs are readily accessible to workers in their work areas, and during all work shifts.
- **Inform and train employees** on the requirements of the standard, the hazards of the chemicals in their work areas, the protective measures available in their workplace, how to use or implement these measures, and who they should contact if an issue arises.
- **Evaluate and assess** your HazCom program and revise it as needed to address any changed in the workplace, and to ensure that it is still meeting its objectives.

Hazard Communication Compliance

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Learn the Standard

ez Explanations™
summaries from the J. J. Keller® subject-matter experts

Employers who have hazardous chemicals in their workplaces are required by OSHA's 29 CFR 1910.1200 Hazard Communication Standard (HCS) to implement a hazard communication program that include labels on containers of hazardous chemicals, safety data sheets (SDSs) for hazardous chemicals, and training for workers. Each employer must also describe in a written program how it will meet the requirements of the HCS in each of these areas.

Scope

OSHA's HCS applies to general industry, shipyard, marine terminals, longshoring, and construction employment and covers chemical manufacturers, importers, employers, and employees exposed to chemical hazards. Any employer with one employee and one hazardous chemical is covered.

The HCS covers "any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency." Most chemicals used in the workplace have some hazard potential, and thus will be covered by the rule.

Compliance Point

The hazardous nature of the chemical and the potential for exposure are the factors that determine whether a chemical is covered. If the chemical is not hazardous, it is not covered by the standard. If there is no potential for exposure (e.g., the chemical is inextricably bound and cannot be released), the chemical is not covered by the standard.

Exempt from coverage

Certain hazardous substances are regulated by other agencies; therefore, OSHA has exempted them from coverage by the Hazard Communication Standard. HCS does not apply to the following substances:

- Any hazardous waste, as defined and regulated under RCRA.
- Any hazardous substance, as defined and regulated under CERCLA.
- Tobacco or tobacco products.
- Wood or wood products, including lumber which will not be processed, where the chemical manufacturer or importer can establish that the only hazard the products pose to employees is the potential for combustion.

- Food or alcoholic beverages which are sold, used, or prepared in a retail establishment (such as a grocery store or restaurant) and foods intended for personal consumption by employees while in the work-place.
- Any drug as defined by the federal Food, Drug, and Cosmetic Act when it is in solid, final form for direct administration to the patient (e.g., pills), drugs packaged by the chemical manufacturer for sale to consumers (e.g., over-the-counter drugs), and drugs intended for personal consumption by employees while in the workplace (e.g., first aid supplies).
- Cosmetics packaged for sale to consumers and those intended for personal use by employees in the workplace.
- Any consumer product or hazardous substance as defined in the Consumer Product Safety Act and Federal Hazardous Substances Act respectively, used in the workplace in the same manner as normal consumer use, and which use results in exposure which is not greater than exposures experienced by consumers.
- Nuisance particles when they do not pose any physical or health hazard covered by HCS.
- Ionizing and nonionizing radiation.
- Biological hazards.
- Articles.

Compliance Point

In evaluating an article, one must consider the health risk which exposure to that article presents. The term "risk" as opposed to "hazard" is used here, since the hazard is an inherent property of the chemical and exists no matter the quantity of exposure. To be exempted as an article, exposure must not pose a risk to employee health.

Checklist for compliance

To ensure you are in compliance with the rule:

- ❑ Obtain a copy of the standard,
- ❑ Read and understand the rule's requirements,
- ❑ Identify who has primary responsibility for:
  - ❑ Preparing and maintaining the written program.
  - ❑ Obtaining Safety Data Sheets (SDSs).
  - ❑ Maintaining the workplace SDS files.
  - ❑ Making sure containers in the facility are properly labeled.
  - ❑ Labeling shipped containers leaving your facility.
  - ❑ Conducting HazCom training.

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- ❑ Prepare a list of hazardous chemicals,
- ❑ Prepare and implement a written Hazard Communication program,
- ❑ Ensure containers are labeled,
- ❑ Obtain an SDS for each hazardous chemical,
- ❑ Make SDSs available to employees,
- ❑ Inform and train employees,
- ❑ Establish procedures to maintain the program, and
- ❑ Establish procedures to evaluate program effectiveness.

Regulatory Citation

29 CFR 1910.1200 Hazard Communication and Appendices

Key Definitions

Article: A manufactured item other than a fluid or a particle: (i) which is formed to a specific shape or design during manufacturer; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical, and does not pose a physical hazard or health risk to employees.

Chemical: Any substance, or mixture of substances.

Chemical Manufacturer: An employer with a workplace where chemical(s) are produced for use or distribution.

Classification: To identify the relevant data regarding the hazards of a chemical; review those data to ascertain the hazards associated with the chemical; and decide whether the chemical will be classified as hazardous according to the definition of hazardous chemical in the Hazard Communication standard. Classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

Combustible Dust: Means a solid material composed of distinct particles or pieces, regardless of size, shape, or chemical composition, which presents a fire or deflagration hazard when suspended in air or some other oxidizing medium over a range of concentrations.

Consumer Product: Any consumer product or hazardous substance, as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, when used in the workplace for the purpose intended and whose use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended.

Exposure or Exposed: Means that an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g. accidental or possible) exposure. “Subjected” in terms of health hazards includes any route of entry (e.g. inhalation, ingestion, skin contact or absorption.)

GHS: The Globally Harmonized System of Classification and Labelling of Chemicals.

Hazardous Chemical: Any chemical which is classified as a physical hazard or a health hazard, or an unclassified hazard as defined in this section.

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Hazard Not Otherwise Classified (HNOC): Refers to an adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes addressed in the Hazard Communication standard. This classification does not apply to physical or health effects for which there is a hazard class already identified, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA (e.g. acute toxicity Category 5).

Mixture: A combination or a solution composed of two or more substances in which they do not react.

Produce: To manufacture, process, formulate, blend, extract, generate, emit, or repackage.

Substance: Chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

Use: To package, handle, react, emit, extract, generate as a byproduct, or transfer.

Summary of Requirements

The HazCom standard requires that employers who have employees exposed to hazardous chemicals:

- **Identify and list hazardous chemicals** in their workplaces, e.g. create and maintain a "chemical inventory."
- **Obtain Safety Data Sheets (SDSs) and labels** for each hazardous chemical, if not provided by the manufacturer, importer, or distributor.
- **Implement a written HazCom program**, including provisions for proper container labeling, SDSs, and employee training.
- **Communicate hazard information to employees** through proper labels, SDSs, and formal training programs.

Manufacturers and distributors of hazardous chemicals have additional responsibilities, including evaluating and classifying chemicals as to their hazards, creating SDSs, and labeling shipped containers with detailed information as described in the standard.

In Depth

No one knows exactly how many chemicals may be present in American workplaces. The number of chemical substances registered in the Chemical Abstracts Service (CAS) Registry reached 60 million in 2011. And while not all of these chemicals are commercially produced, it provides an indication of the breadth of the problem facing employers.

The scope of workplaces in which chemical exposures occur is also very broad. Most chemical substances are mixtures, and most workers are exposed to mixtures of chemicals rather than unique chemicals.

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While these chemicals have utility and benefits in their applications, they also have the potential to cause adverse effects. These adverse effects include both health hazards such as carcinogenicity and sensitization, and physical hazards, for example, flammability and reactivity properties.

To protect workers from the effects of hazardous chemicals, and to reduce the occurrence of chemical source illnesses and injuries, employers need information about the hazards of the chemicals they use, as well as recommended protective measures. Workers have both a right and a need to know this information too, especially so that they can take steps to protect themselves when necessary.

The HazCom standard requires that the hazards of all chemicals imported into, produced, or used in U.S. workplaces are evaluated, and that this hazard information is transmitted to affected employers and exposed employees. This "downstream flow of information" requirement means that producers of chemicals have the primary responsibility for generating and disseminating information, whereas users of those chemicals can access the information and provide it to their employees.

Did You Know

According to the Bureau of Labor Statistics (BLS), acute illnesses and injuries due to chemical exposures in the workplace have decreased 42% since the Hazard Communication Standard was first promulgated.

In 1983, OSHA issued the original Hazard Communication Standard that applied only to manufacturers. A subsequent revision, called HazCom 1994 or HCS 1994, was performance-oriented, allowing chemical manufacturers and importers to convey information on labels and material safety data sheets in whatever format they choose.

In 2012, the HCS was aligned with the United Nations' *Globally Harmonized System of Classification and Labeling of Chemicals* or GHS for short. Called HazCom 2012 (or HCS 2012) the revised standard uses "harmonized" hazard classifications found in the GHS, and incorporated the standardized label and safety data sheet (SDS) formats and elements called for in GHS.

Did You Know

OSHA says that the HCS gave the workers the 'right to know,' but aligning the HCS with the Globally Harmonized System gives workers the 'right to understand.'

Chemical Manufacturers, Importers, and Suppliers

Chemical manufacturers and importers have to prepare labels for containers and SDSs for downstream users based upon a chemical's hazard evaluation.

Every container of hazardous chemicals an employer receives must be labeled, tagged, or marked with the required information. A properly completed SDS has to accompany the first shipment of the chemical and with the next shipment after the SDS is updated.

Employers

Employers that use hazardous chemicals need to have a HazCom program in place to provide chemical hazard information to exposed employees. "Use" means to package, handle, react, or transfer, and includes any situation where a chemical is present in such a way that employees may be exposed under normal conditions or in an emergency.

Unless excepted under §1910.1200(b)(3) or (4), employers who have employees with exposure must develop a written hazard communication program that covers:

- A chemical list;
- Container labels and other forms of warning;
- Collection and availability of SDSs; and
- Employee information and training.

Checklist

Hazard communication compliance checklist

- ❑ Obtain a copy of the HCS rule
- ❑ Read and understand the rule's requirements
- ❑ Prepare a written hazard communication program
- ❑ Assign responsibilities
- ❑ Prepare a chemical list
- ❑ Ensure all chemical containers are labeled
- ❑ Ensure there is an SDS (or Material Safety Data Sheet (MSDS) for older chemicals not recently received) for each chemical
- ❑ Provide training for all workers with exposure risks
- ❑ Review the program routinely

Responsibilities for Communicating Hazards

Chemical manufacturers and importers	• Classify the hazards of each product. • Communicate the hazard information and associated safety measures downstream to customers through labels and SDSs.
Distributors	• Communicate the hazard information and associated safety measures downstream to customers (other distributors and end-users) through labels and SDSs.
Employers	• Identify and list hazardous chemicals in the workplaces. • Obtain SDSs and labels for each hazardous chemical. • Develop and implement a written hazard communication program, including labels, SDSs, and employee training, based on the list of chemicals, SDSs and label information. • Communicate hazard information to employees through labels, SDSs and formal training programs.
Employers in work operations where employees only handle chemicals in sealed containers (warehousing or retail sales)	• Ensure that labels on incoming containers are not removed. • Maintain SDSs that are received. • Provide SDS upon employee request. • Provide training relative to spills and leaks.
Retail distributors	• Provide SDS upon request to commercial customers. • Post a sign to inform customers that SDSs are available.

Compliance Point

Does the HazCom standard apply to offices?

Office workers who encounter hazardous chemicals only in isolated instances are not covered by the rule. OSHA considers most office products (such as pens, pencils, adhesive tape) to be exempt under the provisions of the rule. OSHA has stated that intermittent or occasional use of a copying machine does not result in coverage under the rule. However, if an employee handles the chemicals to service the machine, or operates it for long periods of time, then the standard would apply.

Limited Coverage

There are two types of work operations where coverage of the rule is limited (but not totally eliminated). Those work operations are:

- Laboratories, because there is a separate standard for them, and
- Work operations where chemicals are only handled in sealed containers, such as warehouses.

In laboratories, employers do not have to have a written HazCom program and list of chemicals. They do have to:

- Make sure that labels on incoming containers of hazardous chemicals are not removed or defaced;
- Maintain any safety data sheets that are received with incoming shipments of hazardous chemicals;
- Make SDSs readily accessible during each workshift to laboratory employees when they are in their work areas; and
- Provide laboratory employees with information and training on the chemical hazards in the work area, methods to detect exposures, ways to protect themselves, and so on.

Enforcement Note

Hazard Communication Standard, 29 CFR 1910.1200, was the second most-violated regulation for the warehousing and storage industry in fiscal year 2016.

In work operations like warehouses, where employees only handle chemicals in sealed containers which are not opened under normal conditions of use, employers must:

- Make sure container labels on incoming containers of hazardous chemicals are not removed or defaced;

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- Maintain copies of any safety data sheets that are received with incoming shipments of the sealed containers of hazardous chemicals;
- Obtain an SDS as soon as possible for sealed containers of hazardous chemicals received without a safety data sheet if an employee requests the safety data sheet;
- Make SDSs available during each work shift to employees when they are in their work area(s); and
- Provide employees with information and training in accordance with section 1910.1200(h) as needed to protect them in the event of a spill or leak of a hazardous chemical from a sealed container.

Read the Reg

Let's look at the regs:

29 CFR 1910.1200(b)(4) In work operations where employees only handle chemicals in sealed containers which are not opened under normal conditions of use, this section applies to these operations only as follows:

Labels on incoming containers of hazardous chemicals are not removed or defaced;

Maintain copies of any safety data sheets that are received with incoming shipments of the sealed containers of hazardous chemicals or obtain a safety data sheet as soon as possible for sealed containers of hazardous chemicals received without a safety data sheet if an employee requests the safety data sheet, and ensure that the safety data sheets are readily accessible during each work shift to employees when they are in their work area(s); and,

Train employees except for the location and availability of the written hazard communication program to the extent necessary to protect them in the event of a spill or leak of a hazardous chemical from a sealed container.

All containers are subject to leakage and breakage, so employees who work in operations where they handle only sealed containers are potentially exposed to hazardous chemicals, so information and training must cover the potential size of any spills or leaks and what actions employees are expected to take when a spill or leak occurs.

Compliance Point

Retail workers who encounter hazardous chemicals only in isolated instances are not covered by the rule. However, many retail workers are exposed to hazardous chemicals including flammable liquids, oils, and cleaning products as part of their assigned work duties. All chemicals and their uses should be reviewed to determine if the standard would apply.

Hazard Classification Procedures

The basis for hazard communication is the chemical hazard evaluation and classification.

Those who know the most about the chemicals — the chemical manufacturers and importers — must classify the hazards of the chemicals they produce or import and convey hazard information to downstream employers where the chemicals are used.

An employer that manufactures, processes, formulates, blends, mixes, repackages, or otherwise changes the composition of a hazardous chemical is also considered a "chemical manufacturer."

Distributors and employers may choose to conduct hazard classifications if they are concerned about the adequacy of the hazard information received for the chemicals they use in their business or distribute to others.

Hazard information is standardized, both in the evaluation and classification method, as well as in label elements, SDS elements, and hazard statements. In other words, if a chemical is determined to be a "Category 1 flammable gas" there is a predetermined pictogram, signal word and other label elements, hazard and precautionary statements, based upon that classification that must be used.

Compliance Point

Employers are not required to classify chemicals unless they choose not to rely on the classification performed by the chemical manufacturer or importer for the chemical to satisfy this requirement.

Chemical manufacturers, importers or employers classifying chemicals must identify and consider the full range of available scientific literature and other evidence concerning the potential hazards. The process of hazard classification consists of four basic steps:

- Selection of chemicals to evaluate,
- Collection of data,
- Analysis of the collected data, and
- Records of the rationale behind the results obtained.

OSHA requires chemical manufacturers to consult Appendix A to §1910.1200 for classification of health hazards, and Appendix B to §1910.1200 for the classification of physical hazards.

Mixtures

Chemical manufacturers, importers, or employers evaluating chemical mixtures must follow the procedures described in Appendices A and B to §1910.1200. Under HCS, it is recommended to use the test data for the complete mixture, if available. If not, then, there are other options for classifying the mixture using "bridging principles" based on ingredients and data.

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