

According to the [Environmental Protection Agency's Chemical Data Reporting Program](#), more than 8,700 chemicals are produced or imported into the United States each year. Exposure to these substances places employees at risk for a variety of chemical-related illnesses and injuries.

The Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard (HCS) -- outlined in [29 Code of Federal Regulations \(CFR\) 1910.1200](#) -- gives employees and employers the "right to know" the hazards of chemical exposure in the workplace. The HCS, established in 1983, was revised in 2012 to provide a single uniform format -- using the [United Nation's Globally Harmonized System of Classification and Labelling of Chemicals](#) (GHS) -- to classify chemicals by their health, physical, and environmental hazards. Additionally, the GHS is used to specify hazard communication elements for labeling and safety data sheets (SDSs).

Now, all employers with hazardous chemicals in their workplaces must provide labels and SDSs for their exposed employees and train them to handle the chemicals safely. Also, chemical manufacturers, importers, and distributors must test the hazards of the chemicals they produce, import, or distribute; and provide labels and SDSs to explain the hazard information to their downstream customers.



Recommendations for Employers

OSHA recommends that employers take these steps to implement an effective hazard communication program in the workplace:

- **Learn OSHA's Hazard Communication Standard.**
Employers can find the standard at [osha.gov/hazcom](https://www.osha.gov/hazcom).
- **Assign someone with the primary responsibility for coordinating the implementation of the program.**
This includes identifying staff for particular activities such as training.
- **Prepare a written hazard communication program.**
The program must explain how employers will label chemicals, provide SDSs and other warnings, and train and

inform employees. It must also list all hazards present in the workplace. OSHA recommends using the product identifier (the same name that appears on the hazardous chemical's label and SDS) to make it easier for employers to track the status of SDSs and labels of a particular hazardous chemical.

- **Train employees.**

Employers must train their employees about hazards in their immediate work areas at the time of their first assignment and when a new hazard is introduced. Workers must be told about the information on SDSs and labels, how to access the SDSs, what personal protective measures are in place, and whom to contact if there is a problem.

- **Review the hazard communication program.**

Employers must update their programs to account for any new chemicals or hazards in the workplace to ensure the program is always relevant.

- **Label containers.**

Employers must label all containers with at least the product identifier and general information about the chemical's hazards. While employers may use various labeling methods, they must give employees access to complete information about a chemical's hazard. Labels must be legible, in English, and clearly displayed. Other languages may also be displayed. Employers must relabel items if labels are removed or defaced.

- **Maintain SDSs for each hazardous chemical in the workplace.**

While labels must go along with hazardous chemicals, SDSs are a complete source of information about

a chemical's hazards and must contain details in the standard 16-section format.

Sections 1-8 of the SDS contain:

- identification;
- hazards;
- composition;
- first-aid measures;
- fire-fighting measures;
- accidental-release measures;
- handling and storage; and
- exposure controls/personal protection.

Sections 9-11 and 16 of the SDS contain:

- physical and chemical properties;
- stability and reactivity information;
- toxicological information; and
- other information, including date of preparation or last revision of the SDS.

The SDS must also contain sections 12-15 to align with the GHS; OSHA does not enforce these sections, which other agencies handle.

If an employer does not receive an SDS from a supplier, the employer must request one. Employers must give employees access to the SDSs in their work areas and during their shifts in either a binder or electronic format. If electronic SDSs are used, employers must train employees on how to:

- access them;
- back up the electronic system where the SDSs are kept; and
- make a hard copy of the SDSs accessible to both employees and medical personnel.

Information for Public-Sector Employers

Public-sector employers include those working in cities, counties, state agencies, public schools, and volunteer service organizations. Public employers in Texas are not subject to OSHA regulations. However, they are subject to the [Texas Hazard Communication Act, Texas Health and Safety Code Chapter 502](#), which references current OSHA regulations for labeling and SDSs. This Act, administered and enforced by the Texas Department of State Health Services, requires employers to train employees to read and understand labels and SDS elements when they receive hazardous chemicals. Employers must train employees before requiring them to work with a hazardous chemical. Learn more by visiting dshs.texas.gov/hazcom or calling DSHS at 888-778-9440, ext. 2434.

Manufacturer, Importer, and Distributor Responsibilities

Chemical manufacturers, importers, and distributors must label shipped containers with the following information:

- **Product identifier**
The product identifier is the chemical name, code number, or batch number. The manufacturer, importer, or distributor can decide on the appropriate product identifier. Still, the same identifier must appear on both the label and in Section 1 of the SDS.
- **Signal word**
The signal word alerts the reader of a potential hazard. It indicates how severe the hazard is by using words, such as “danger” or “warning.” A label must contain only one of these two words, no matter how many hazards a chemical may have. “Danger” is used for more severe hazards within a class, and “warning” is used for less severe hazards.
- **Pictograms**
Pictograms are symbols that communicate information about a chemical’s hazards. Pictograms consist of a red square frame, set at a point, with a black hazard symbol on a white

background. They must be wide enough to be visible. While the GHS uses a total of nine pictograms, as depicted in the figure in this fact sheet, OSHA enforces only eight. The environmental pictogram is not required. The eight pictograms OSHA requires do not replace the required diamond-shaped [U.S. Department of Transportation chemical labels](#).

- **Hazard statements**
Hazard statements describe the nature and, in some cases, the degree of a chemical hazard. Example: “Causes damage to kidneys through prolonged or repeated exposure when absorbed through the skin.”
- **Precautionary statements**
Precautionary statements are recommended measures for preventing or reducing harmful effects from improper storage, handling, or other exposure to a hazardous chemical. OSHA allows flexibility in combining, ordering by priority, or removing inappropriate statements. Example: “Keep away from heat, sparks, and open flames,” “Store in a well-ventilated

place,” and “Keep cool” may be combined to read: “Keep away from heat, sparks, and open flames. Store in a cool, well-ventilated place.”

- Contact information
Include the name, address, and telephone number of the chemical manufacturer, importer, or another responsible party.

Chemical manufacturers, importers, and distributors must provide downstream users an SDS for each chemical produced or imported when they ship the product. If the

chemical manufacturer, importer, or employer preparing the SDS is aware of important information about a chemical’s hazards or ways to protect against them, the new information must be added to the SDS within three months. Each SDS must be in English, although it may also be in other languages. The information must be provided in the standard 16-section format.

Once chemical manufacturers, importers, and distributors learn essential information about a chemical’s hazards or ways to protect against them, they must revise the chemical’s label within six months.

Example of a GHS-Compliant Label

Product Identifier	→	WD40 Aerosol
Pictogram	→	 → Warning! Flammable. Repeated Exposure may cause skin dryness
Signal Word & Hazard Statement	→	Avoid sparks, flames, heat and smoking when using this product. Extinguish all ignition sources. Avoid inhalation of vapors/spray and contact with skin and eyes. Wash hands thoroughly after handling. Wear protective gloves and eye/face protection. Stable under normal temperature conditions and recommended use. Avoid exposing aerosol cans to direct sunlight or temperatures above 50°C or 122°F. During fire, toxic gases (CO, CO2) are formed.
Precautionary Statement	→	If swallowed: DO NOT INDUCE VOMITING! Immediately rinse mouth and drink plenty of water. Get medical attention. In case of fire, use foam; water spray, fog, or mist; dry chemicals, sand, dolomite, etc.
Name, address, and phone number	→	See Safety Data Sheet for further details regarding safe use of this product. My Company, MyStreet, MyTown, TX 00000, Tel: 444-999-9999

The GHS hazard pictograms, signal word, and hazard statements should be located together on the label. The actual label format or layout is not specified in the GHS. National authorities may choose to specify where information should appear on the label or allow supplier discretion.

To
Download
a 10-page
OSHA
Sample
Safety Data
Sheet,
[Click Here.](#)



Label Pictograms

OSHA’s required pictograms must be in the shape of a square set at a point and include a black hazard symbol on a white background with a red frame sufficiently wide enough to be clearly visible.

A square red frame set at a point without a hazard symbol is not a pictogram and is not permitted on the label.



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1-800-252-7031, Option 2

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