

**2024 Updates to the
Hazard Communication Standard
29 CFR 1910.1200**

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Presentation Objectives

- ▶ Review of OSHA's HAZCOM standard 1910.1200
- ▶ Discuss SDS components
- ▶ Discuss container labels
- ▶ 2024 Updates to the standard
- ▶ Compliance deadlines
- ▶ Find out how these changes impact you

Background

- ▶ Chemicals have become an important element of almost every aspect of modern life.
- ▶ From cleaning fluids to pharmaceuticals, pesticides, and paints chemicals are produced in workplaces, and may be used in workplaces downstream.
- ▶ While chemicals have utility and benefits in their applications, they also have the potential to cause adverse effects.

Background

- ▶ A “***hazardous chemical***” means any chemical which is classified as a:
 - physical hazard
 - health hazard
 - a simple asphyxiant
 - combustible dust
 - hazard not otherwise classified

Background

- ▶ The total number of chemical substances that have been developed and registered in the Chemical Abstracts Service(CAS) Registry reached 279 million substances
- ▶ While not all these chemicals are produced commercially today, this vast number indicates the scope of the potential problems in workplaces regarding the safe use of chemicals
- ▶ In addition, most chemical substances are formulated into mixtures for use in the workplace

Background

- ▶ While most people can readily associate working in a chemical manufacturing plant as being a job that involves chemical exposures, there are many other types of facilities where such usage is also commonplace



Background

For example:

- ▶ Construction workers may be exposed to paints, lacquers, thinners, asphalt fumes, or crystalline silica



Background

- ▶ Hair stylists are exposed to chemical dyes and other hair products that contain hazardous chemicals.



Background

- ▶ To protect workers from adverse effects, and to reduce the occurrence of chemical source illnesses and injuries, employees need:
 - information about the hazards of the chemicals they use, and
 - recommended protective measures.

- ▶ In the US the use of hazardous chemicals in the workplace is regulated under OSHA Hazard Communication Systems 29 CFR 1910.1200
- ▶ Poll question Q1 - HazCom history

History of the Hazard Communication System (HCS)

1983

The HCS (also known as the “Right-to-Know Law”) was first promulgated in 1983, and covered the manufacturing sector.

2012

Hazard communication was aligned with Globally Harmonized System of Classification and Labelling of Chemicals (GHS) ver.3

It was later expanded (1994) to cover all industries where workers are potentially exposed to hazardous chemicals

1994

Hazard communication updates to align with GHS ver.7

2024

What is GHS?

Internationally negotiated approach to hazard communication. It provides:

- ▶– Harmonized definitions of hazards
- ▶– Specific criteria for labels
- ▶– Harmonized format for safety data sheets



What is GHS?

3 basic areas of focus:

- ▶ – Classification of physical hazards
- ▶ – Classification of health and environmental hazards
- ▶ – Hazard communication



History of the GHS

- ▶ The GHS also provides a basis for harmonization of rules and regulations on chemicals at national, regional and worldwide level, an important factor also for trade facilitation.
- ▶ Living document, updated every biennium
- ▶ The most recent edition is the tenth revised edition of the GHS published in 2023

Hazard Communication 29 CFR 1910.1200

Why is Hazard Communication important?

- One of the most cited standards
- Crucial for workers protection

Knowing the hazard helps:

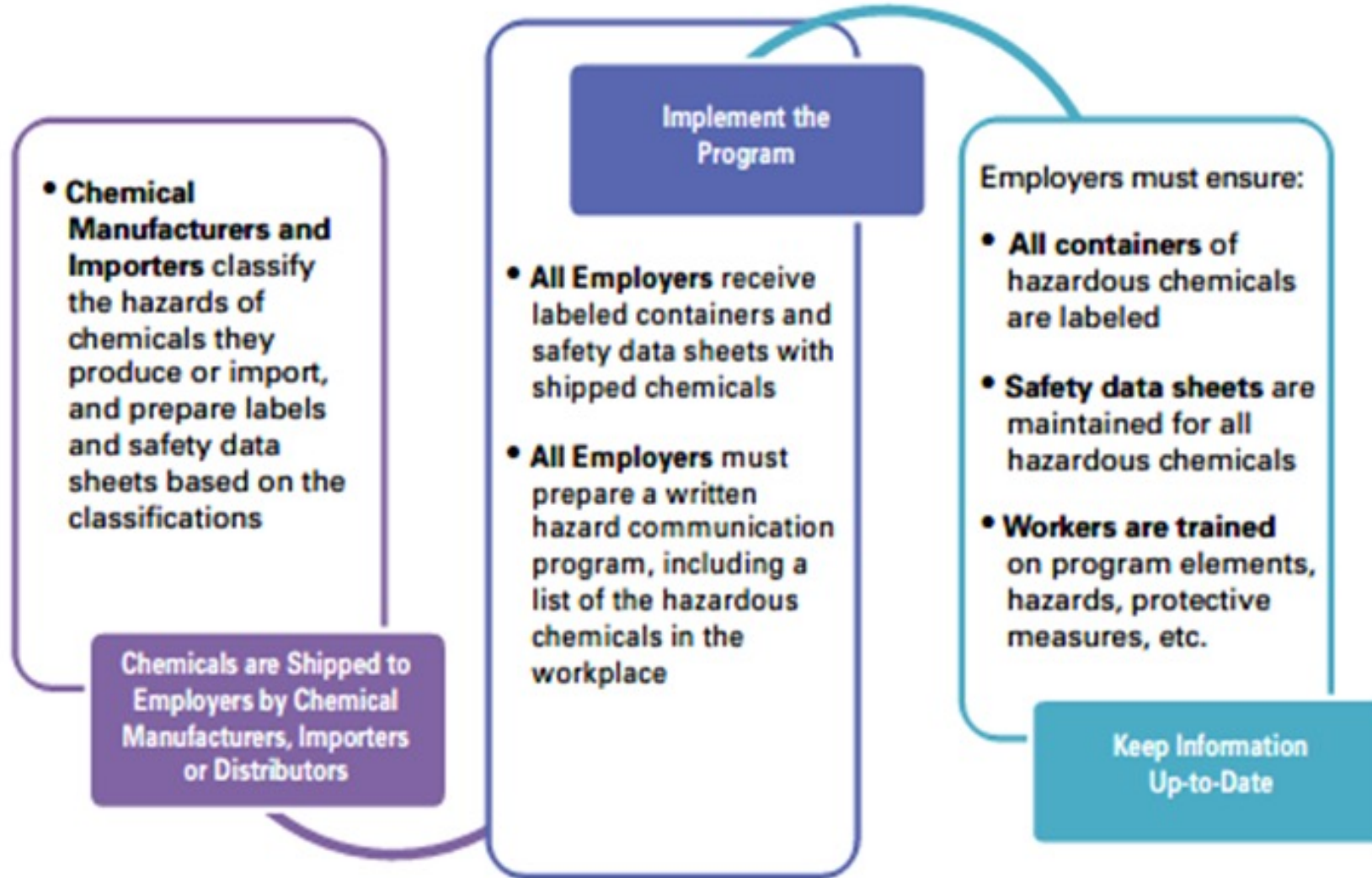
- Identify the presence/absence
- Inform about ways of exposure
- Guidance on how to avoid exposure
- Guidance on waste disposal



Hazard Communication 29 CFR 1910.1200

- ▶ Q2 Poll HazCom use

Hazard Communication Workflow



Hazard Communication 29 CFR 1910.1200

Employers must ensure:

- ▶ Labeled containers received
- ▶ Workplace labels are created
- ▶ SDSs present
- ▶ Train employees



Label Requirements

- ▶ Chemical manufacturers and importers must provide labels that include GHS-harmonized **pictograms**, **signal words**, and **hazard statements** for each class and category of hazard.
- ▶ **Precautionary statements** are also required

Label Requirements

- ▶ Pictograms are required on shipped containers
- ▶ Pictograms must not be blank and must have red borders
- ▶ Intended to convey specific information about the hazards of a chemical.

Label Requirements

- ▶ A **signal word** is a word used to alert the reader of a potential hazard on the label and to convey the level of severity of hazard.
- ▶ Signal words, such as “warning” and “danger”, are used for less severe and more severe hazards, respectively.

Label Requirements

- ▶ A **hazard statement** is a standard phrase assigned to a specific hazard class and category that describes the nature of the hazard(s) of a chemical, and also the degree to which it is hazardous.

For example: *Harmful if inhaled.*

[for Category 4 Acute Toxicity – Inhalation].

Label Requirements

- ▶ A **precautionary statement** is a statement that describes the recommended actions to be taken to minimize or prevent the adverse effects of exposure to, or improper storage or handling of, a hazardous chemical.
- ▶ An example of a precautionary statement according to OSHA: *Wear face protection [for Explosives, Division 1.1].*

Safety Data Sheets

- ▶ Safety data sheets are a 16-section format comprised of mandatory and non-mandatory categories.
- ▶ The required SDS format is enumerated in following sixteen sections:

Safety Data Sheets

1. Identification of the substance or mixture and of the supplier
2. **Hazards identification**
3. **Composition/information on ingredients**
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. **Exposure controls/personal protection**
9. **Physical and chemical properties**
10. Stability and reactivity
11. **Toxicological information**
12. Ecological information (non-mandatory)
13. Disposal considerations (non-mandatory)
14. Transport information (non-mandatory)
15. Regulatory information (non-mandatory)
16. Other information, including date of preparation or last revision

Hazard Communication 29 CFR 1910.1200

- ▶ In order to understand the requirements of HazCom 2024 as applied to your workplace, it is useful to have a general familiarity with the organization of the standard.
- ▶ It is divided into regulatory paragraphs that describe requirements, which are further supplemented by appendices that contain specific details.

Organization of the Regulatory Requirements for Hazard Communication

Paragraphs of the standard

- ▶ Purpose (a)
- ▶ Scope and Application (b)
- ▶ Definitions (c)
- ▶ Hazard Classification (d)
- ▶ Written Hazard Communication Program (e)
- ▶ Labels and Other forms of Warning (f)
- ▶ Safety Data Sheets (g)
- ▶ Employee Information and Training (h)
- ▶ Trade Secrets (i)
- ▶ Effective Dates (j)

Organization of the Regulatory Requirements for Hazard Communication

Appendices to the standard

- ▶ Appendix A, Health Hazard Criteria (Mandatory)
- ▶ Appendix B, Physical Hazard Criteria (Mandatory)
- ▶ Appendix C, Allocation of Label Elements (Mandatory)
- ▶ Appendix D, Safety Data Sheets (Mandatory)
- ▶ Appendix E, Definition of “Trade Secret” (Mandatory)
- ▶ Appendix F, Guidance for Hazard Classifications re: Carcinogenicity (Non-Mandatory)

Updated Hazard Communication

- ▶ In May 2024 OSHA updated the Hazard Communication to align mainly to GHS rev. 7. Some minor changes align with GHS rev. 8.
- ▶ Changes became effective July 19, 2024

Hazard Communication 2024 Updates - Scope

- ▶ Maintaining alignment with the GHS (primarily Rev. 7) and U.S. trading partners (including Health Canada's WHMIS)
e.g. incorporating new hazard classes and categories
- ▶ Addressing issues identified during implementation of the 2012 update to the HCS
e.g. improving and streamlining precautionary statements,
providing additional clarification of existing regulatory requirements,
- ▶ Improving alignment/coordination with other US Agencies

- ▶ Q3 Poll – Would we see changes on the SDS? If yes, what sections?

Hazard Communication 2024 Updates

Maintaining alignment with the GHS (primarily Rev. 7) and U.S. trading partners (including Health Canada's WHMIS)

- ▶ Paragraph (f)(12) – small packages. Updates include special labelling provisions for 3 ml and 100 ml containers similar to Health Canada's WHMIS requirements.
- ▶ Paragraph (i) – trade secrets. Updates include mandatory use of prescribed concentration ranges when exact percentages or percentage ranges of materials are claimed as a trade secret. The prescribed concentration ranges align with those used by Health Canada's WHMIS.

Labeling small packages

100 ml containers

- ▶ Product identifier
- ▶ Pictogram(s)
- ▶ Signal word
- ▶ Chemical manufacturer's name and phone number; and
- ▶ A statement that the full label information for the hazardous chemical is provided on the immediate outer package.

3 ml containers

- ▶ Product identifier

Immediate outer package must include

- ▶ A statement that the small container(s) inside must be stored in the immediate outer package bearing the complete label when not in use
- ▶ Meet all labeling requirements

Trade secrets

- ▶ If the concentration or concentration range is being claimed as a trade secret, the SDS provides the prescribed ranges
- ▶ Example From 0.1% to 1%; From 0.5% to 1.5%; From 1% to 5%; From 3% to 7%, etc.
- ▶ The prescribed concentration range used must be the narrowest range possible.
- ▶ Manufacturers may provide a range narrower than those prescribed



Hazard Communication 2024 Updates

Appendix A (health hazards) updates align primarily with revised health hazard definitions and general updates to hazard classes in GHS Rev. 7.

▶ Updates include:

 Skin corrosion/irritation non-animal test methods from Rev. 8 added to promote use of alternative methods.

 General updates to hazard classes

Hazard Communication 2024 Updates

Appendix B (physical hazards) updates align primarily with Rev. 7

- ▶ Updates include:
 - Flammable gases (expanding hazard categories)
 - Desensitized explosives
 - Aerosols (including additional hazard category)
 - Chemicals under pressure

Hazard Communication 2024 Updates

Appendix C (label elements) updates align primarily with Rev. 7 and include:

- ▶ new or updated hazards – from changes to Appendix A and B
- ▶ updated guidance on the allocation of elements
e.g. Combined statements (fire response and first aid measures)
- ▶ precautionary statements
 - – updated conditions on when precautionary statements apply
 - - updated statements for select hazard classes

Hazard Communication 2024 Updates

Appendix D (SDS) updates align primarily with Rev. 7 and include revisions to SDS:

- ▶ Section 2 – Hazard identification

Clarification presentation of chemical hazard information

Section 2(a) – hazard classification including hazards due to a change in chemical's physical form (d)(1)(i)

Section 2(b) – hazard classified due to chemical reaction products associated with known or reasonably anticipated use or applications (d)(1)(ii)

Hazard Communication 2024 Updates

Appendix D (SDS) updates align primarily with Rev. 7 and include revisions to SDS:

Section 3 – Composition/ information on ingredients

Allows for claiming a trade secret for concentration ranges by using prescriptive concentration ranges

Section 8 - Exposure controls/Personal protection

Clarification on inclusion of PEL, TLV, or other exposure limits for individual ingredients or constituents in mixtures

Section 9 – Physical and chemical properties

e.g. Inclusion of particle size

Section 11 – Toxicological information

e.g. Inclusion of interactive effects and use of SAR

Hazard Communication 2024 Updates

Addressing issues identified during implementation of the 2012 update to the HCS

- ▶ Paragraph (d)(1) – hazard classification. The final rule clarifies which hazards must be evaluated and the hazard information required on the label versus the SDS.
- ▶ Paragraph (f)(11) – labels. The final rule adds flexibility for label updates on packages that have been released for shipment.



Hazard Communication 2024 Updates

- ▶ Paragraph (f)(12) – labels.
The final rule clarifies labeling requirements for small packages.



Hazard Communication 2024 Updates

Improving alignment/coordination with other US Agencies

- ▶ Paragraph (f)(5) – bulk shipment. The Final rule provides increased coordination with DOT
- ▶ Paragraph (c) released for shipment definition – the final rule aligns with EPA

Hazard Communication 2024 Updates

Pictograms now include:

- ▶ The addition of desensitized explosives in the **flame pictogram**
- ▶ Hazards not otherwise classified (HNOC) have been added to the **exclamation point pictogram**.



2024 Hazard Communication - compliance dates

- ▶ Compliance by January 2026

Manufacturers, distributors Update labels and SDS for substances

- ▶ By July 20, 2026

Employers update workplace labels, hazard communication program and training as necessary

2024 Hazard Communication - compliance dates

- ▶ By July 19, 2027

Manufacturers, distributors to update labels and SDS's for mixtures

- ▶ By January 18, 2028

Employers update workplace labels, hazard communication program and training as necessary for mixtures

- ▶ Transition Period – May 20, 2024 to the effective completion dates may comply with 2012 or 2024 version

2024 Hazard Communication Impact

- ▶ If you are not a chemical manufacturer or importer, and you already have a hazard communication program that complies with the original HCS, you will have limited changes to make related to compliance with the revised standard

2024 Hazard Communication Impact

Core requirements that employers are expected to meet have not changed!

- ▶ Have a written hazard communication program
- ▶ Provide employees with information and training on hazardous chemicals in their work areas, and
- ▶ Maintain Safety Data Sheets for each chemical in use

2024 Hazard Communication Impact

Employers to be aware of this new standard, as changes occur upstream.

- ▶ As a manufacturer reviews the classification and implements the content of the SDS
- ▶ Employers need to incorporate those updated SDSs into their hazard communications programs and training

QUESTIONS/COMMENTS



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