

HazCom 2012: Overview of OSHA's Revised Hazard Communication Standard

JUNE 2012



INTRODUCTION

Information about chemicals in U.S. workplaces has been regulated by the Occupational Safety and Health Administration (OSHA) under the Hazard Communication Standard, also called "HazCom," for over 25 years. OSHA recently revised the Hazard Communication Standard to harmonize with the United Nations' Globally Harmonized System (GHS) for Classification and Labeling of Chemicals. The revised standard, informally called "HazCom 2012," includes changes to how information about chemical hazards is to be prepared and presented in labels and in Material Safety Data Sheets (MSDSs), now called Safety Data Sheets (SDSs). This paper provides a basic overview of changes to labeling and SDS requirements.

HAZCOM 2012 IS A SPECIFICATION TYPE OF STANDARD

HazCom 2012 represents a marked shift in OSHA's approach to the regulation of chemical hazard communication. In the terminology of standards, the original HazCom was largely what is referred to as a performance standard, as opposed to a specification standard. In contrast, HazCom 2012 prescribes specific statements for use in labeling and SDSs based on a detailed hazard classification scheme, as well as specific headings and subheadings for use in SDSs.

HAZCOM 2012 SPECIFIES LABELING FOR "CLASSES" OF HAZARDS AND "CATEGORIES" OF SEVERITY

HazCom 2012 defines 29 "classes" of hazards (e.g., acute toxicity, flammability, etc.), most of which are subdivided into "categories" based on hazard severity (e.g., for flammable liquids, Categories 1-4, with 1 being most severe). The hazard classes consist of 10 health hazards and 16 physical hazards adopted from the GHS, as well as 3 OSHA-defined classes (combustible dust, pyrophoric gases, and simple asphyxiants). The hazard classification system prescribed by HazCom 2012 also modifies requirements for how the hazards of substances and mixtures are to be evaluated.

For each hazard class and category, HazCom 2012 prescribes specific language and labeling elements that must be provided. See Table 1 for a comparison of elements required in the current and revised standards.

Table 1. Comparison of label elements required under the current and revised Hazard Communication standards.

| Current Standard (HazCom) | Revised Standard (HazCom 2012) |
|---|--|
| <ul style="list-style-type: none"> Identity of the hazardous chemical(s) | <ul style="list-style-type: none"> Product identifier |
| <ul style="list-style-type: none"> Name and address of the chemical manufacturer, importer, or other responsible party | <ul style="list-style-type: none"> Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party |
| <ul style="list-style-type: none"> Appropriate hazard warning(s) | <ul style="list-style-type: none"> Prescribed hazard statement(s) (e.g., "Harmful if inhaled") Prescribed signal word ("Danger" or "Warning") Prescribed precautionary statement(s) regarding: <ul style="list-style-type: none"> Prevention (e.g., "Use only outdoors or in a well-ventilated area") Response (e.g., "Get medical advice/attention if you feel unwell") Storage (e.g., "Store locked up") Disposal (e.g., "Dispose of contents/container in accordance with local regulations") Prescribed pictogram(s) (e.g., Skull and Crossbones) |

HAZCOM 2012 USES EIGHT PICTOGRAMS

HazCom 2012 prescribes the use of eight pictograms developed under the GHS. These pictograms consist a black hazard symbol surrounded by a red frame. Requirements for the use of pictograms depend on hazard class as well as hazard category (severity) as shown in Table 2 below. Note that each symbol/pictogram is associated with up to six different types of hazards, and a label may contain multiple pictograms.

Table 2. Hazard classes and pictograms required under HazCom 2012
(adapted from Appendices A-C and Figure C.1, 77 FR 17825).

| Hazard Class(es) | Associated Pictogram | Symbol Name |
|--|--|--|
| Acute toxicity (severe) |  | Skull and Crossbones |
| Acute toxicity (harmful) Skin irritation Eye irritation | Respiratory tract irritation Narcotic effects Skin sensitization |  Exclamation Mark |
| Carcinogenicity Germ cell mutagenicity Reproductive toxicity | Specific target organ toxicity Respiratory sensitization Aspiration hazard |  Health Hazard |
| Skin corrosion Eye damage Corrosive to metals |  | Corrosion |
| Flammable solid, liquid, gas, aerosol Pyrophoric solid, liquid, gas Organic peroxide | Self-heating chemical Self-reactive chemical Emits flammable gas in contact with water |  Flame |
| Oxidizing solid, liquid, gas |  | Flame Over Circle |
| Gas under pressure |  | Gas Cylinder |
| Explosive Self-reactive chemical Organic peroxide |  | Exploding Bomb |
| Combustible dust Simple asphyxiant <i>Lower severity categories of certain hazards</i> | No pictogram | No Symbol |

SAFETY DATA SHEETS HAVE MORE SPECIFICATIONS

The current HazCom Standard does not prescribe a particular order or format in which information should be provided. In contrast, HazCom 2012 specifies required headings to be used on Safety Data Sheets (SDSs) and the order in which they should appear. Required headings are shown in Table 3.

Table 3. Safety data sheet headings required under HazCom 2012
(adapted from Table D.1, 77 FR 17884).

| Required Safety Data Sheet Headings |
|---|
| 1. Identification |
| 2. Hazard(s) 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* |
| 13. Disposal considerations* |
| 14. Transport information* |
| 15. Regulatory information* |
| 16. Other information, including date of preparation or last revision |

*Non-mandatory

HazCom 2012 additionally requires that SDSs include, in Section 2, information that is required on product labels: signal word, hazard statement(s), and precautionary statement(s). In contrast to the pictograms with red borders that appear on labels, this section of the SDS is to include black hazard symbol(s) or symbol name(s).

FULL IMPLEMENTATION IS SCHEDULED FOR JUNE 2015

Requirements for labels and safety data sheets under the new standard will take effect in June 2015, and employer requirements to train workers regarding the new labeling and SDS elements will take effect in December 2013. The full implementation schedule is shown in Table 4. During the transition, manufacturers, importers, distributors, and employers are permitted to comply with either the current or revised standard.

Table 4. Implementation schedule for HazCom 2012
(adapted from Table XIII-3, 77 FR 17740).

| Activity | Effective Date |
|---|------------------|
| Employers to train employees on new label elements and safety data sheet format. | December 1, 2013 |
| Chemical manufacturers, importers, distributors, and employers to be in full compliance, except: | June 1, 2015 |
| Distributors permitted to ship containers with non-GHS labels until December 1, 2015. | |
| Employers to update workplace hazard communication programs and provide additional training regarding newly identified hazards by June 1, 2016. | |

FOR MORE INFORMATION

For more information about OSHA’s revised Hazard Communication Standard, please contact the Chemical Hazard Communication Group at Applied Safety and Ergonomics, Inc.

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