

FAQ SHEET

- OSHA REVISED HAZARD COMMUNICATION STANDARD (HCS) (29 CFR 1910.1200, MARCH 26, 2012)

Acronyms and Abbreviations Used

ACGIH	-	American Conference of Government Industrial Hygienists
ANSI	-	American National Standards Institute
CFR	-	Code of Federal Regulations
GHS	-	Globally Harmonized System
HCS	-	Hazard Communication Standard
HMIS	-	Hazardous Material Information System
NFPA	-	National Fire Protection Association
MSDS	-	Material Safety Data Sheet
OSHA	-	Occupational Health and Safety Administration
PEL	-	Permissible Exposure Limit
SDS	-	Safety Data Sheet
TLV	-	Threshold Limit Value

What is the Hazard Communication Standard (HCS)?

OSHA's HCS requires the development and dissemination of information to workers about the identities and hazards of chemicals in the workplace in order to ensure chemical safety.

What does the HCS require?

Chemical manufacturers and importers are required to evaluate the hazards of the chemicals they produce or import, and prepare labels and safety data sheets to convey the hazard information to their downstream customers. All employers with hazardous chemicals in their workplaces must have labels and safety data sheets for their exposed workers, and train them to handle the chemicals appropriately.

Material Safety Data Sheets (MSDSs) and hazard communication (HAZCOM) training are used to comply with the standard.

Why has OSHA revised the HCS?

The HCS has been revised to align it with the Globally Harmonized System of

Classification and Labeling of Chemicals (GHS) in order to provide a common and coherent approach for classifying chemicals and communicating hazard information.

OSHA believes the original HCS gave workers the “right to know”, but the revised HCS gives workers the “right to understand”.

What is the Globally Harmonized System (GHS)?

The GHS is an international approach to hazard communication. It provides agreed criteria for classification of chemical hazards, and a standardized approach for labels and safety data sheets. It is based on major existing systems around the world, including OSHA's original HCS.

What are the major changes to the HCS?

The original OSHA HCS was performance-oriented, allowing chemical manufacturers and importers to convey information on labels and material safety data sheets in whatever format they chose. The GHS approach has certain aspects that are performance-oriented, but the key provisions are a uniformity-oriented approach, i.e. it is more standardized. The three major areas of change are in hazard classification, labels, and safety data sheets:

For hazard classification, the definitions of hazard have been changed to provide specific criteria for classification of health and physical hazards, as well as classification of mixtures. These specific criteria are intended to help ensure that evaluations of hazardous effects are consistent across manufacturers, and that labels and safety data sheets are more accurate as a result.

Chemical manufacturers and importers are required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statements must also be provided.

Safety Data Sheets (SDS's) now have a specified 16-section format.

The revised HCS is written as a modification to the existing HCS. Those parts of the original HCS that do not relate to the GHS, or are already consistent with it, remain unchanged.

How will chemical hazard evaluation change under the revised HCS?

Under both the original and revised HCS's, an evaluation of chemical hazards must be performed considering the available scientific evidence concerning such hazards.

In the original HCS, the hazard determination provisions have definitions of hazard and the evaluator determines whether or not the data on a chemical meet those definitions. It is a performance-oriented approach that provides parameters for the evaluation, but not specific, detailed criteria.

In the revised HCS, the hazard classification approach is quite different. The revised HCS has specific criteria for each health and physical hazard, along with detailed instructions for hazard evaluation and determinations as to whether mixtures or substances are covered. Both hazard classes and hazard categories are established for most of the effects. The classes are divided into categories that reflect the relative severity of the effect. The original HCS does not include categories for most of the health hazards covered, so this new approach provides additional information that can be related to the appropriate response to address the hazard.

OSHA has included the general provisions for hazard classification in paragraph (d) of the revised HCS, and added appendixes (A and B) that address the criteria for each health or physical effect.

How will labels change under the revised HCS?

Under the original HCS, the label preparer must provide the identity of the chemical, and the appropriate hazard warnings. This may be done in a variety of ways, and the method to convey the information is left to the preparer.

Under the revised HCS, once the hazard classification is completed, the standard specifies what information is to be provided for each hazard class and category. Labels require the following elements:

Pictogram: a symbol plus other graphic elements, such as a border, background pattern, or color that is intended to convey specific information about the hazards of a chemical. Each pictogram consists of a different symbol on a white background within a red square frame set on a point (i.e. a red diamond). There are nine pictograms under the GHS to convey the health, physical and environmental hazards. Only eight pictograms are required under the HCS. The environmental pictogram is not used as environmental hazards are not within OSHA's jurisdiction.

Signal words: a single word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label, either "danger" or "warning." "Danger" is used for the more severe hazards, while "warning" is used for less severe hazards.

Hazard Statement: a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where

appropriate, the degree of hazard.

Precautionary Statement: a phrase that describes recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling of a hazardous chemical.

Will workplace labeling provisions change under the revised HCS?

The original HCS provides employers with flexibility regarding the type of system to be used in their workplaces and OSHA has retained that flexibility in the revised HCS. Employers may choose to label workplace containers either with the same label that would be used on shipped containers for the chemical under the revised HCS, or with label alternatives that meet the requirements of the standard.

Alternative labeling systems, such as the National Fire Protection Association (NFPA) 704 Hazard Rating and the Hazardous Material Information System (HMIS), are permitted for workplace containers. However, the information supplied on these labels must be consistent with the revised HCS, e.g. no conflicting hazard warnings or pictograms.

How will the Safety Data Sheet (SDS) change under the revised HCS?

The information required on the SDS will remain essentially the same as that in the original HCS which indicates what information has to be included in an SDS but does not specify a format for presentation or the order of information. The revised HCS requires that the information on the SDS be presented using consistent headings and specifies the headings to be included and the order in which they are to be provided. In addition, the information to be included under each heading is specified.

The SDS format is the same as the American National Standards Institute (ANSI) standard format which is widely used in the US.

What are the sections required in a SDS?

The sections are:

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

Sections 12-15 may be included in the SDS, but are not required by OSHA.

Will TLVs be required on the Safety Data Sheet (SDS)?

OSHA is retaining the requirement to include the American Conference of Government Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) on the SDS in the revised HCS. In addition to TLVs, OSHA Permissible Exposure Limits (PELs), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, are also required.

What happened to Material Safety Data Sheets (MSDS's)?

Some minor changes to terminology have been made in order to align the revised HCS with language used in the GHS. For example, the term "hazard determination" has been changed to "hazard classification" and "material safety data sheet" has been changed to "safety data sheet."

When is the revised HCS effective?

There is a phase-in period.

Employers must train employees on the new label elements and SDS format to facilitate recognition and understanding by December 1, 2013.

Chemical manufacturers, importers, distributors and employers must comply with all modified provisions of the HCS by June 1, 2015, except distributors shall not ship containers labeled by the chemical manufacturer or importer unless it has a GHS label after December 1, 2015.

Employers must update alternative workplace labeling and the hazard communication program, as necessary, and provide additional employee training

for newly identified physical or health hazards by June 1, 2016.

During the transition period, chemical manufacturers, importers, distributors, and employers may comply with either the revised, or the original HCS, or both.

How can I get more information?

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