



The GHS is an acronym for ***The Globally Harmonized System of Classification and Labeling of Chemicals***. It is a system for harmonizing hazard classification criteria and chemical hazard communication elements worldwide. The GHS is not a regulation; rather it is a framework or guidance for classifying and labeling hazardous chemicals. The purpose of classification under the GHS is to provide harmonized information to users of chemicals with the goal of enhancing protection of human health and the environment.

Many countries already have regulatory systems in place for chemical classification and hazard communication. These systems may be similar in content and approach, but their differences are significant enough to require multiple classifications, labels, and safety data sheets (SDS) for the same product. This leads to inconsistent protection for those potentially exposed to the chemicals, as well as creating extensive regulatory burdens on companies producing chemicals.

The GHS document (referred to as "The Purple Book") establishes agreed hazard

classification and communication provisions with explanatory information on how to apply the system. Regulatory authorities in countries adopting the GHS will take the agreed criteria and provisions, and implement them through their own regulatory process and procedures. The GHS document provides countries with the regulatory building blocks with which to develop or modify existing national programs that address classification of hazards and transmittal of information about those hazards and associated protective measures.

Why do we need the GHS?

According to the U.S. Department of Labor and the Occupational Safety and Health Administration, there are many benefits to global implementation of the GHS. It is anticipated that application of the GHS will:

- Enhance the protection of human health and the environment by providing an internationally understood system,
- Provide a recognized framework to develop regulations for those countries without existing systems,
- Facilitate international trade in chemicals whose hazards have been identified on an international basis,
- Reduce the need for testing and evaluation against multiple classification systems.

Benefits to **companies** include:

- A safer work environment and improved relations with employees,
- An increase in efficiency and reduced costs from compliance with hazard communication regulations,

- Application of expert systems resulting in maximizing expert resources and minimizing labor and costs,
- Facilitation of electronic transmission systems with international scope,
- Expanded use of training programs on health and safety,
- Reduced costs due to fewer accidents and illnesses,
- Improved corporate image and credibility.

Benefits to **workers** and **members of the public** include:

- Improved safety for workers and others through consistent and simplified communications on chemical hazards and practices to follow for safe handling and use,
- Greater awareness of hazards, resulting in safer use of chemicals in the workplace and in the home.

Excerpt from <http://www.osha.gov/dsg/hazcom/ghs.html>

How does the GHS affect compliance with the OSHA Hazard Communication Standard (HCS)?

The GHS is a voluntary international system that imposes no binding treaty obligations on countries. To the extent that countries adopt the GHS into their systems, the regulatory changes would be binding for covered industries. Since the U.S. has an existing system, the OSHA Hazard Communication Standard, it is expected that the GHS components will be applied within the framework/infrastructure of this existing hazard communication regulatory scheme.

However, the specific hazard criteria, classification processes, label elements and Safety Data Sheet (SDS) requirements within any region's existing system will need to be modified to be consistent with the harmonized elements of the GHS. It is anticipated that **ALL** existing hazard communication systems will need to be changed in order to apply the GHS. For example, if U.S. regulatory authorities such as OSHA, EPA or CPSC were to adopt the GHS, new label elements, such as hazard pictograms/symbols, would be required on labels.

In September 2006, OSHA published an Advanced Notice of Proposed Rule Making (ANPRM). In this notice, OSHA provided further information about the GHS, the benefits of adopting it, and its potential impact on the HCS. Additionally, in September 2009, the Notice of Proposed Rule Making (NPRM) was published. Considering all the comments received from the Advanced Notice, this rule laid groundwork for aligning the HCS with the GHS. The primary impact of revising the HCS to adopt the GHS would be on compliance obligations for producers of hazardous chemicals. The modifications to the HCS would involve a reclassification of these chemicals per GHS criteria, as well as preparation and distribution of new labels and revised SDS. The primary change in workplaces where chemicals are used but not produced would be to integrate the new approach into the workplace hazard communication program, including assurance that both the employers and employees understand the pictograms and other information provided on the SDS and labels.

To learn more ...

- The GHS, in its entirety (including classification criteria and label and MSDS requirements), can be downloaded at: http://www.unece.org/trans/danger/publi/ghs/ghs_rev03/03files_e.html
- OSHA's Notice of Proposed Rulemaking on the GHS is available at: http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FEDERAL_REGISTER&p_id=21110
- A 12-hour training course on the GHS is offered by the Society for Chemical Hazard Communication (SCHC): <http://www.schc.org/training.php>
- For information sheets on additional GHS topics:
 - OSHA site: <http://www.osha.gov/dcsp/alliances/schc/schc.html#documents> - go to 'Products and Resources'.
 - or SCHC site: http://www.schc.org/issues.php?start_from=5&ucat=&archive=&subaction=&id=&cat=9 - see 'GHS Information Sheets'.
- The OSHA Guide to the Globally Harmonized System of Classification and Labeling of Chemicals is available at: <http://www.osha.gov/dsg/hazcom/ghs.html>

The information contained in this sheet is believed to accurately represent provisions of U.S. regulations, consensus standards, and current GHS requirements. However, SCHC cannot guarantee the accuracy or completeness of this information. Users are responsible for determining the suitability and appropriateness of these materials for any particular application.

This sheet was developed through OSHA's Alliance Program for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor.