



Why GHS?

With the large number of hazardous chemicals in the world, expecting one agency to effectively regulate them all is impractical, if not impossible. Basically, each country or organization is on its own.

Many countries, like the U.S., and organizations have established laws and regulations requiring information to be prepared and transmitted through labels and/or safety data sheets (SDS) to those people using or handling hazardous chemicals.

Most of the laws and regulations put in place by local, state, national and international agencies are similar but their differences can be significant enough to require different labels and SDSs to be produced for the same chemical depending upon where it is used or who is using it.

Inconsistencies between national and international laws create a regulatory and compliance nightmare that can disrupt commerce and compromise safety.

And, some countries have no system at all.

These facts combined with the growth in global trade of chemicals form the need for an “internationally harmonized approach to the classification and labeling of chemicals.”

By standardizing the components of different systems, the GHS will protect workers, consumers, emergency responders, the environment and the public by creating a comprehensive system to identify chemical hazards and communicate to all who are potentially exposed.

Additionally, global adoption of GHS is expected to reduce costs and inefficiencies associated with the international trade of chemicals.

Four U.S. agencies represented the U.S. in the creation of the GHS: OSHA, which acted as the lead agency; The Department of Transportation

What is GHS?

GHS stands for the **Globally Harmonized System of Classification and Labeling of Chemicals**.

The GHS was developed by the United Nations. It was determined that existing chemical classification and labeling systems (such as the current Hazard Communication Standard (HazCom)) “should be harmonized in order to develop a single, globally harmonized system to address classification of chemicals, labels and safety data sheets.”

The U.N. believes “widespread availability of information on chemicals will provide the foundation for national programs for safe management of chemicals and lead to safer conditions for the global population and the environment,” and that “it will also facilitate international trade by promoting greater consistency in the national requirements for chemical hazard classification and communication.”

The scope of the original mandate called for two elements:

- 1) Harmonized criteria for classifying substances and mixtures according to their health, environmental and physical hazards; and
- 2) Harmonized hazard communication elements, including requirements for labeling and safety data sheets.

(DOT); The Environmental Protection Agency (EPA); and the Consumer Product Safety Commission (CPSC).

The criteria for hazard classification are harmonized and hazard statements, symbols, and signal words have been standardized and harmonized, forming an integrated hazard communication system.

This does not mean everything in the GHS is uniform. It does give competent authorities the ability to decide how to apply certain elements of the GHS; for instance, based upon the target audience.



MSDS = SDS

Safety Data Sheets (SDS) are essential to the GHS and provide comprehensive information about a substance or mixture for use in the workplace.

In the GHS, they serve the same function that the Material Safety Data Sheet (MSDS) does in OSHA's HazCom Standard.

They are used as a source of information about hazards and to obtain advice on safety precautions.

SDS Format

Information in the SDS will be presented using the following 16 headings in the order given below

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



Is it a Global Law?

A major concern many people have upon first learning about the GHS is that it is a global law encroaching upon the sovereignty of their own country. The GHS is not a global law or regulation; it is a system or a set of recommendations.

The GHS uses a "building block" approach and no country is obligated to adopt all or even any part of the GHS.

Countries are free to determine which of the building blocks will be applied in different parts of their system. However, where a country's system incorporates a GHS building block, that coverage should be consistent.

In other words, the GHS may be seen as a collection of building blocks from which to form a regulatory approach.

It is hoped that the application of GHS worldwide will eventually lead to a fully harmonized situation.