

1. Introduction

The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) is an international standard to classify chemicals by their hazards and use standardized hazard labels and safety data sheets. It was developed by the United Nations to ensure that information about chemical hazards is consistent and understandable globally. This supports safer use, transport, and disposal of chemicals. It also facilitates international trade. This position paper will outline how the global chemical distribution industry views the GHS and outline opportunities for improvement.

2. GHS

2a. GHS scope

Chemicals are classified based on their potential health effects (e.g. toxicity, carcinogenicity, skin irritation), physical hazards (e.g. flammability, explosiveness, reactivity) and environmental hazards (aquatic toxicity).

These classifications are communicated along the value chain using pictograms, signal words (e.g. 'danger' or 'warning'), hazard statements (e.g. 'causes skin irritation') and precautionary statements that explain how to handle the chemical safely, including storage and disposal.

The GHS also standardizes the format and content of Safety Data Sheets (SDS) which provide comprehensive information about a chemical, including its properties, hazards, protective measures, and safety precautions.

2a. GHS implementation

The GHS provides a basis for harmonized chemical regulations at national, regional, and global levels. GHS is based on a 'building block approach' allowing international organizations and countries to implement selected elements of the system and at their own pace. Some countries have chosen to implement GHS as a non-binding, voluntary standard for companies, and others as a legally binding requirement.

The first edition of the GHS, intended as the initial basis for global implementation, was published in 2003. Since then, the GHS has been updated, revised, and improved every two years as experience with its implementation grows. In 2024 the 10th revised edition was published¹, with a new revision expected in 2025.

Internationally, the GHS is implemented through the 'UN Recommendations on the Transport of Dangerous Goods – Model Regulations', also called the 'GHS Purple Book'. These recommendations are in turn the bases for legal international instruments for different modes of transport. These instruments include the IMDG Code (for maritime), the ICAO (for air) and ADR (for road). GHS also informs international policies regarding occupational health, waste characterization and industrial accident prevention.

Countries are encouraged to implement the GHS as soon as possible. However, many countries have not yet done so. Out of a 193 UN member states, only 84 have implemented GHS. The countries that did implement GHS are selective in implementing the building blocks and/or have not updated their regulations according to the latest revisions of the GHS. The EU is one of the most advanced countries in implementing GHS, but even they have only implemented up until revision seven.

3. Chemical distributor's view on current GHS

The chemical distribution industry views the GHS positively and appreciates the efforts by policymakers so to create and update the system. Global implementation of the GHS offers clear benefits for chemical distributors:

¹ Amendments included for instance a classification procedure for desensitized explosives, the use of non-animal testing methods for classifying health hazards and provisions for long-term aquatic toxicity classification.

- By providing clear and consistent hazard information, GHS enhances the safety of chemical distributor **workers**. Implementing GHS enables those who handle chemicals along the value chain to recognize and reduce risks by using best-practice handling², storage, and disposal methods. This can lead to fewer accidents and health issues related to chemical exposure;
- Similarly the GHS improves the safety of **consumers**. Ultimately chemical distributors depend on consumers buying products containing their chemicals. Labelling information allows these consumers to make informed choices regarding the products they purchase and use;
- By providing a standardized approach to classifying and labelling chemicals, GHS simplifies **compliance** for chemical distributors. With a single set of rules to follow, chemical distributors can streamline their operations and reduce the costs associated with meeting different regulatory requirements in different countries;
- Thanks to GHS there is **less need for testing**, including the use of laboratory animals;
- Standardized labelling and classification also facilitates **international trade** by reducing the need for multiple labels and safety data sheets for different countries, resulting in more efficient operations. This is of particular relevance because chemical distributors buy and sell their chemicals across borders and typically have a large and ever-changing portfolio of chemicals;
- Improved **image** of the chemical distribution industry thanks to prevention of accidents and damage to people and planet.

Taking a broader view than just the chemical distribution industry, it is clear that the GHS also provides significant benefits to all stakeholders: governments, supply chain partners, workers, consumers and the environment. The costs associated with exposure to harmful chemicals are estimated to be in the range of several per centage points of global GDP; likewise, the economic benefits of action from preventing chemical exposure, for instance through GHS, are significant.³ That is why not only industry, but also NGOs and consumers are asking for better implementation and continued revision of the GHS.

4. Towards a better GHS

At the same time, chemical distributors are keen on improving the GHS to further enhance safety, compliance, and efficiency.

We highlight the following aspects:

- There is substantial evidence that the benefits of GHS implementation far outweigh the costs.⁴ However in many places GHS implementation is still absent or incomplete, mainly due to lacking financial and regulatory capacities. By offering more guidance and financial and in-kind **support**, developing countries will implement GHS sooner and more complete. This will help to avoid differences in implementation between countries, and result in fewer (unnecessary) compliance challenges for companies to navigate. The action plans coming from the Global Framework of Chemicals should prioritize this. As acknowledged by the OECD, there is clear potential for (inter)national policymakers and ICTA to cooperate.
- Prevent going alone by introducing national hazard classes. Case in point is the EU, which has added extra hazard classes⁵ to its European Classification, Labelling and Packaging regulation. These **hazard classes** are not currently included in the GHS Purple Book and this deviation sets a concerning precedent and undermines global harmonization and alignment. Decisions to add new hazard classes should be taken by the UN GHS Subcommittee. Based on science evidence, they will approve new hazard classes if they are appropriate and proportionate to achieve the protection objectives. Currently a global disharmony exists between the EU and other countries that have implemented GHS.
- Industry as well as governments should offer **training programs** to ensure that personnel are up-to-date with the latest standards. This applies to factory workers, truck drivers, warehouse personnel, inspectors, policymakers, etc.

² ICTA offers a 'best practice library' thereby supporting its members to work more safely

³ G.G. Bond, 'Synthesis of GHS Cost Benefit Papers', 2019

⁴ Ibid.

⁵ ED HH Cat. 1 & 2; ED ENV Cat. 1 & 2; PBT, vPvB; PMT, vPvM

- Develop and implement **digital tools** and automated systems for the processing of safety data sheets. Safety data sheets can be hundreds of pages long, and often only a fraction is relevant to an individual recipient. By offering digital versions, recipients will be able to navigate the documents more quickly. It will also be easier to update safety data sheets in case of errors or new insights. Distributors are investing in technology but often regulators and inspectors still require a version in paper or pdf.
- GHS states that suppliers should “promptly” respond to new and significant changes (i.e. to the GHS classification or required control measures) they receive about a chemical hazard by updating the label and safety data sheet. However **re-labelling** of products is typically complicated and expensive. We propose to specify that the update must be done within six months of becoming aware of the new information. We support the US addition that for chemicals that have been released for shipment and are awaiting future distribution, chemical manufacturers, importers, distributors, or employers should have the option not to relabel those containers.⁶
- Chemical distributors ask to be allowed more time to sell existing stocks with the labels that applied at the time of labelling.
- It is absolutely key that the existing rules are better **enforced**. We currently see many products entering the market that are not compliant with GHS. This causes an uneven playing field with the companies that do abide the rules. The priority should be to first organize better enforcement of the existing rules. If compliant companies are burdened with ever more rules, while some of their competitors ignore them, their relative price difference between them will continue to grow.

ICTA

The International Chemical Trade Association represents the chemical distribution industry and promotes the safe and sustainable use of chemicals. The chemical distribution industry has an important role in enabling chemistry to make a positive impact, while managing the associated risks. Aside from taking responsibility for the safety of their own operations, chemical distributors interact with their customers and suppliers to maximize risk management measures and safe use.

For more information visit www.icta-chem.org.

⁶ In the US it is specified that if they do not relabel the containers, they must provide the updated label for each individual container with each shipment (see Inspection Procedures for the Hazard Communication Standard, RedlineText 16 July 2024-508, page 14).