



# Safety Data Sheets

White Paper

---

[aiha.org](https://www.aiha.org)

Version 1 | April 6, 2021

Sponsored by the Social Concerns Committee.

Continuous improvement of all aspects of hazard communication is a critical element of protecting the safety and health of workers and our communities. Safety Data Sheets, or SDSs, are an essential source of information that enables the anticipation, recognition, evaluation, and control of workplace exposures and environmental hazards of chemical substances.

As originally intended, an SDS was not meant to be a stand-alone document. It was part of an overall hazard communication program. Inaccurate, incomplete, and outdated SDSs can increase the risk of illnesses, injuries, and environmental consequences arising from the handling, storage, transportation, and use of hazardous chemicals.

Industrial hygiene, safety, emergency response, and environmental health professionals rely on SDSs as sources of information to assist employers and employees in properly managing hazardous chemicals.

Adoption of the Globally Harmonized System (GHS) into the OSHA Hazard Communication Standard (29 CFR 1910.1200-2012) was supported by AIHA. It was an important step in the process of standardizing SDS format and content. It is important for OSHA to update the Hazard Communication Standard as needed, both to remain aligned with the GHS and to work within the Subcommittee of Experts on the GHS to promote greater international harmonization.

There is a need to improve accessibility to validated and peer-reviewed data available on the physical and chemical properties of materials and their components, as well as health, safety, and environmental hazard information on them. This will enable SDS authors to improve the accuracy, consistency, and effectiveness of SDSs. The quality, accuracy, and usefulness of SDSs can be improved by enhancing the competency of SDS authors through targeted training and participation in a program that recognizes competence and encourages continuous professional development. SDS authors must have the necessary technical skills and tools to ensure that SDS information is accurate and written in clear and understandable language. Software is a useful tool for authoring SDS, but those using the software should be trained in authoring so they can properly review these documents and ensure accuracy. Requiring chemical manufacturers and importers to ensure the completeness and accuracy of their SDS and labels is essential for both worker and community safety and health. Although many companies are diligent in their hazard communication activities, other companies fail to invest and profit in this important work. They should be held accountable.

## Good industrial hygiene practice recommends:

- OSHA should maintain alliances and partnerships between regulators, professional organizations, universities, educators, and the regulated community to develop best practices and metrics that improve the quality and accuracy of SDSs.
- OSHA should require SDS authors to have adequate training and qualifications to be competent professionals. Competent professionals authoring SDSs should, at a minimum, possess training in a relevant science such as industrial hygiene, environmental health, toxicology, hazardous materials, emergency response, or safety. Registration as a registered professional, SDS and Label Authoring (SDSRP) through the AIHA registries is recommended for all SDS authors. Certifications such as Certified Industrial Hygienist (CIH) and Certified Safety Professional (CSP), as well as experience in the hazardous materials field, may support competency with additional specialized training.



HEALTHIER WORKPLACES | A HEALTHIER WORLD

AIHA | 3141 Fairview Park Dr., Suite 777 | Falls Church, VA 22042 | [aiha.org](http://aiha.org)

- OSHA should increase enforcement on compliance with the OSHA Hazard, Communication Standard, emphasizing SDS and label compliance and accuracy, including review of chemical classifications.
- OSHA should support international activity to harmonize the classification of high-volume hazardous chemicals. Although it may not be feasible to make these classifications mandatory, a recommended internationally accepted classification would help ensure more consistent SDSs and labels.
- Periodic review of SDSs should be conducted by manufacturers and/or importers to assure continued accuracy and completeness. To ensure that these critical documents remain complete and compliant, companies should institute an appropriate, regular review process in addition to complying with the 90-day update requirement in the standard.
- Industry and professional groups should support the improvement and expansion of universities' curriculum and promote hazard communication training in trade and technical schools and community colleges.

Occupational and environmental health and safety professionals have a key role in improving the quality and value of information available on an SDS. We intend to educate our members and others about the current activities related to the preparation and use of SDSs, including efforts to increase their quality and utility.

In conjunction with AIHA's Alliance Agreement with OSHA, we pledge our full assistance to OSHA, other regulatory bodies, industry, and the international community. Furthermore, we will continue to monitor, comment, and advise in this process to promote the most accurate and complete SDSs to deliver safety and health information to all users.

We strongly request OSHA to continue to work with the UN Committee of Experts on the GHS, both to stay aligned with the GHS and improve international harmonization and to identify ways for the agency to improve the completeness and accuracy of SDSs, including increased enforcement.

Good SDSs are the basis for complete worker protection because workers cannot be protected from unknown hazards. Safety Data Sheets are an important foundation of industrial hygiene and should be promoted as such.

## References

- AIHA. (2021). *Competency Framework: SDS and Label Authority Registry*. <https://www.aiha.org/education/frameworks/competency-framework-sds-label-authoring-registry>
- United Nations Economic Commission for Europe. *About the GHS*. <https://unece.org/about-ghs>
- United States Department of Labor, Occupational Safety and Health Administration. *Hazard Communication*. <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1200>
- (2012). *Hazard Communication*. *Federal Register*, Vol. 77 (No. 58), 17574-17603. [https://www.osha.gov/FedReg\\_oshaf/FED20120326.pdf](https://www.osha.gov/FedReg_oshaf/FED20120326.pdf)



HEALTHIER WORKPLACES | A HEALTHIER WORLD