

Are Your Safety Data Sheets Really in Compliance?

The Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)), revised in 2012, requires that the chemical manufacturer, provide Safety Data Sheets (SDSs) (formerly MSDSs or Material Safety Data Sheets) for each hazardous chemical to users to communicate information on the chemical hazards.,

The SDSs are now required to be presented in a consistent user-friendly, 16-section format like above. This safety tip provides guidance to help workers who handle hazardous chemicals to become familiar with the format and understand the contents of the SDSs.

The SDS includes information such as the properties of each chemical; and safety precautions for handling, storing, and transporting the chemical. The information contained in the SDS must be in English (although it may be in other languages as well).

Sections 1 - 8 contain general information about the chemical, identification, hazards, composition, safe handling practices, and emergency control measures. This information should be helpful to those that need to get the information quickly.

Sections 9 - 11 and **16** contain other technical and scientific information, such as physical and chemical properties, stability and reactivity information, toxicological information, exposure control information, and other information including the date of preparation or last revision. The SDS must also state that no applicable information was found when the preparer does not find relevant information for any required element.

The SDS must also contain **Sections 12 - 15**, to be consistent with the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS), but OSHA will not enforce the content of these sections because they concern matters handled by other agencies.

A description of all 16 sections of the SDS, along with their contents, is presented above.

SAFETY DATA SHEETS ELEMENTS

- 1. IDENTIFICATION**
Includes product identifier; manufacturer or distributor name, address, phone number, emergency phone number; recommended use; restrictions on use.
- 2. HAZARD(S) IDENTIFICATION**
Includes all hazards regarding the chemical; required label elements.
- 3. COMPOSITION / INGREDIENT INFORMATION**
Includes information on chemical ingredients; trade secret claims.
- 4. FIRST-AID MEASURES**
Includes important symptoms / effect, acute delayed; required treatment.
- 5. FIRE-FIGHTING MEASURES**
Lists suitable extinguishing techniques, equipment; chemical hazards from fire.
- 6. ACCIDENTAL RELEASE MEASURES**
Lists emergency procedures; protective equipment; proper methods of containment and cleanup.
- 7. HANDLING AND STORAGE**
Lists precautions for safe handling and storage, including incompatibilities.
- 8. EXPOSURE CONTROL / PERSONAL PROTECTION**
Lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPEs).
- 9. PHYSICAL & CHEMICAL PROPERTIES**
Lists the chemical characteristics.
- 10. STABILITY & REACTIVITY**
Lists chemical stability and possibility of hazardous reactions.
- 11. TOXICOLOGICAL INFORMATION**
Includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.
- 12. ECOLOGICAL INFORMATION**
Includes ecotoxicity, persistence and degradability; bio accumulative potential and mobility in the soil.
- 13. DISPOSAL CONSIDERATION**
Describes waste residues and information on their safe handling and methods of disposal, including the disposal of contaminated packaging.
- 14. TRANSPORT INFORMATION**
Includes UN number and proper shipping name; transport hazard class(es); packaging group, environment hazards.
- 15. REGULATORY INFORMATION**
Includes safety, health and environmental regulations specific for the product.
- 16. OTHER INFORMATION** As needed.

If an employer uses an electronic system to provide employees with access to SDS sheets, then the employees need to have direct access to the SDSs in their workplaces, without having to go through anyone else to get the information. OSHA also requires a backup to electronic systems in case of power outages, disruptions of service, etc. This backup can be in the form of a master copy of SDSs kept in a central location, use of a fax-back service, the backing up of SDSs to a computer that has an external power source, or other means.

Finally, employers using an electronic system must also be able to immediately produce a paper copy of the SDS sheet upon request of an employee or an OSHA representative, per paragraph **(g) (11)** of the regulatory text. "Safety data sheets shall also be made readily available, upon request, to a designated representative, the Assistant Secretary, and the Director, in accordance with the requirements of **29 CFR 1910.1020(e).**"

Information provided in this safety tip is from *The OSHA Answer Book* by Mark Moran. You can obtain a copy of their bestselling book on their website. Go to <https://shop.oshanation.com/> and order your copy today and use the code **ohiobogo** to receive a special discount.