

A Comparison of the Content of Early MSDSs, MSDSs Under HazCom 1994, and SDSs Under HazCom 2012

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Abstract

With origins in shipyard regulations from the 1960s by the Department of Labor Bureau of Labor Standards, transfer to the Occupational Safety and Health Administration (OSHA) in 1971, expansion under HazCom 1983 and 1994, and alignment with the Globally Harmonized System under HazCom 2012, Safety Data Sheets (SDSs) (formerly Material Safety Data Sheets (MSDSs)) as we know them today have developed considerably over time. This poster explores regulations and standards for MSDSs and SDSs during these periods, illustrating how each new addition changed the content of these documents and their distribution and use by chemical manufacturers, employers, employees, and others.

Early MSDSs, 1968/1972

“Essentially similar” forms LSB OOS-4, DD 1813, and OSHA-20

Figure 1

(DoL, 1972)

Created by: US Department of Labor

Created for: Employers in the ship repairing, shipbuilding, and ship breaking industries

Dates: Proposed August 1968, adopted January 1970, revised May 1972

Applicable regulation(s): 29 CFR §1915, §1916, and §1917

Requirement: Mandatory form

For preparation by: Employers in ship repairing, shipbuilding, and ship breaking industries; federal government contractors

Format: Nine main sections, distributed over two pages:
I. Manufacturer Information
II. Hazardous Ingredients
III. Physical Data
IV. Fire and Explosion Hazard Data
V. Health Hazard Data
VI. Reactivity Data
VII. Spill or Leak Procedures
VIII. Special Protection Information
IX. Special Precautions

Notable changes: First mandated “Material Safety Data Sheet”; used throughout the 1970s; hazardous ingredients grouped into “Paints, Preservatives, & Solvents”, “Alloys and Metallic Coatings”, and “Hazardous Mixtures of Other Liquids, Solids, or Gases”

MSDSs under HazCom 1983/1994

OSHA Form 174

(OSHA, 1985)

Created by: Occupational Safety and Health Administration, US Department of Labor

Created for: Employees in manufacturing workplaces in SIC codes 20 through 39 (later extended)

Dates: Proposed March 1982, adopted November 1983, revised September 1985

Applicable regulation(s): 29 CFR §1910.1200 (1983, 1994)

Requirement: Non-mandatory form

For preparation by: Chemical manufacturers and importers

Format: Eight main sections, distributed over two pages:
I. Manufacturer Information
II. Hazardous Ingredients/Identity Information
III. Physical/Chemical Characteristics
IV. Fire and Explosion Hazard Data
V. Reactivity Data
VI. Health Hazard Data
VII. Precautions for Safe Handling and Use
VIII. Control Measures

Notable changes: Expanded health hazard data section; consolidated previous “Spill or Leak Procedures” and “Special Precautions” sections; marked % composition optional; added fields for other recommended exposure limits, date of preparation, and optional signature of preparer; otherwise maintained much of Form OSHA-20

SDSs under HazCom 2012

29 CFR §1910.1200 Appendix D

(OSHA, 2012)

Created by: Occupational Safety and Health Administration, US Department of Labor; from the United Nations’ Globally Harmonized System of Classification and Labeling of Chemicals

Created for: Employees in all OSHA-covered workplaces subject to 29 CFR §1910.1200

Dates: Proposed September 2009, adopted March 2012

Applicable regulation(s): 29 CFR §1910.1200 (2012)

Requirement: Mandatory headings and subheadings, except for Sections 12 through 15

For preparation by: Chemical manufacturers and importers

Format:
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 (Non-Mandatory)
13. Disposal Considerations (Non-Mandatory)
14. Transport Information (Non-Mandatory)
15. Regulatory Information (Non-Mandatory)
16. Other Information, Including Date of Preparation or Last Revision

Notable changes: Mandated specific headings and subheadings; mandated disclosure of concentrations (exact percentages) of ingredients classified as health hazards; added non-mandatory ecological, disposal, and transport sections

References

US Department of Labor (DoL). (1972). *Material Safety Data Sheet*, Form OSHA-20, OMB No. 44-R1387. May. | Occupational Safety and Health Administration (OSHA), US Department of Labor. (1985). *Material Safety Data Sheet*, Form OSHA 174, OMB No. 1218-0072. | Occupational Safety and Health Administration (OSHA), US Department of Labor. (2012). *Table D.1—Minimum Information on an SDS*. 29 CFR §1910.1200, Appendix D. Available at <https://www.osha.gov/hazcom/appendix-d>.