

Material Safety Data Sheet

Texas Workers' Compensation Commission
Workers' Health and Safety Division
Safety Education & Training Programs

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Introduction

The Material Safety Data Sheet (MSDS) is the primary means of providing information concerning chemical hazards to employers and employees. The manufacturer/supplier of a hazardous chemical is required to prepare an MSDS. The employer must obtain and maintain an MSDS for each hazardous chemical or mixture in his or her workplace.

The Occupational Safety and Health Administration (OSHA) developed the Hazard Communication Standard 29 *CFR* 1910.1200 to ensure that the hazards of all chemicals are evaluated and that information is transmitted to employers and employees.

Goal

This training program assists employees in reading and understanding the MSDS for each hazardous chemical found on the job.

Objectives

Through training, workers will learn to read and understand MSDSs for hazardous chemicals, determine how they can be used safely, understand the risks of exposure and ways to protect themselves.

Responsibilities

In most cases, the manufacturer, importer, or formulator who introduces a product into commerce or the workplace, prepares the MSDS. The MSDS content is based on a chemical hazard determination. A copy of the MSDS is provided to every distributor, supplier, and ultimately to employers.

An employer is required to:

- Have an MSDS available for each hazardous chemical present in the workplace.
- Maintain records of the identity and use of hazardous chemicals.
- Train workers concerning hazards and protective measures shown on the MSDS. Any employee who may be exposed to hazardous chemicals must receive information and training before initial work assignment and whenever any hazard changes.

- Make MSDSs readily available to all who may be exposed to a hazardous substance.

Employers must obtain any MSDS not received with the initial shipment of the chemical from the supplier. If the MSDS is found to be incomplete, the employer must obtain the missing information.

Contents of the MSDS

The Hazard Communication Standard requires 12 items that must be included on a MSDS. A manufacturer or supplier may use a slightly different format for their MSDS, but it should contain the same basic information. No standard format is required as long as the required information is provided.

If any information is unknown or not applicable, it must be stated. All MSDSs must be provided in English. The use of other languages is optional. Mandatory items are:

1. *Identity of chemicals* presenting physical or health hazards. This identification may be exempted depending on trade secret provisions. *The chemical name* is required on the MSDS and on the container.
2. *Physical and chemical characteristics*, such as vapor pressure, flash point, and chemical solubility.
3. *Physical hazards*, such as reactivity, explosiveness, and fire potential.
4. *Health hazards*, including signs and symptoms of illness, and medical conditions that might be aggravated by exposure.
5. *Primary route(s) of chemical entry* into the body.
6. *Permissible exposure limits* published and/or recommended for the chemical.
7. *Carcinogenic* – When the chemical is a carcinogen (cancer-causing), it must be listed as such.
8. *Precautions* necessary for safe use.
9. *Control measures* including engineering, work practices, and personal protective equipment necessary to protect against the hazards.
10. *Emergency and first aid procedures*.
11. *Date* of MSDS preparation or the date of the last change in contents.
12. *Name, address, and phone number of the person responsible* for preparing the MSDS.

Rather than prepare a separate MSDS for every formulation, a 'generic' MSDS may be used if the hazard determination concludes that the formulations are similar in content, and present essentially the same hazards.

MSDS Updates

The preparer must update MSDSs within three months of learning or determining that additional relevant hazard data is available.

MSDS Availability and Retention

An employer must maintain copies of the MSDSs, and ensure that during each work shift that they are readily available to employees while in their work area(s). Electronic access, microfiche, or other alternatives to maintaining paper copies of the MSDS are permitted as long as there are no barriers to immediate access by employees. MSDSs may be posted in areas where the chemicals are used or stored, or put in a binder and placed in accessible areas. The employer may want to keep MSDSs for chemicals that apply to a particular work area in that area only.

Review

1. OSHA developed the Hazard Communication Standard to ensure that chemicals are evaluated for hazards and those hazards are communicated to workers.

True or False?

2. Electronic access to MSDSs can be used if it only causes a short delay.

True or False?

3. How many items must be included in the MSDS?

- a. 3
- b. 6
- c. 12
- d. 24

4. Employees must be trained in Hazard Communication

- a. before they begin an assigned job
- b. when the chemical hazards change
- c. both a and b

Review Answer Key

1. True
2. False. There must be no barriers to immediate access by employees.
3. c.
4. c.

Resources

The Texas Workers' Compensation Commission (TWCC) Resource Center offers a workers' health and safety video tape library. Call 1-800-687-7080 for more information or visit our web site at www.twcc.state.tx.us.

Disclaimer: Information contained in this training program is considered accurate at time of publication.



Safety Violations Hotline
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