# Anderson City Fire Department Hazard Communication



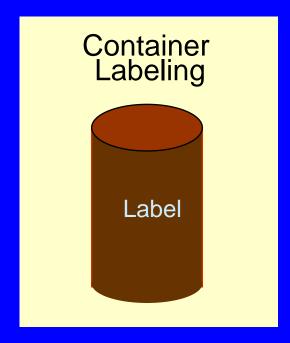
### Introduction

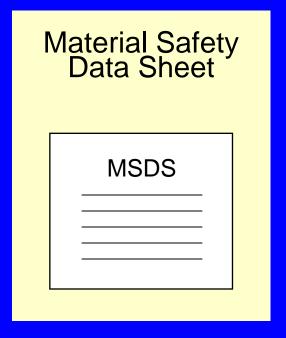
- About 32 million workers work with and are potentially exposed to one or more chemical hazards
- There are approximately 650,000 existing chemical products, and hundreds of new ones being introduced annually
- Chemical exposure may cause or contribute to many serious health effects such as heart ailments, central nervous system damage, kidney and lung damage, sterility, cancer, burns, and rashes
- Some chemicals may also be safety hazards and have the potential to cause fires and explosions and other serious accidents

# Purpose of OSHA's Hazard Communication Standard

To ensure that employers and employees know about work hazards and how to protect themselves so that the incidence of illnesses and injuries due to hazardous chemicals is reduced.







### Who is covered?

OSHA's Hazard Communication (HazCom) standard applies to general industry, shipyard, marine terminals, longshoring, and construction employment and covers chemical manufacturers, importers, employers, and employees exposed to chemical hazards.

## **Employer Responsibilities**

- Identify and list hazardous chemicals in their workplaces
- Obtain Material Safety Data Sheets (MSDSs) and labels for each hazardous chemical, if not provided by the manufacturer, importer, or distributor
- Implement a written HazCom program, including labels, MSDSs, and employee training
- Communicate hazard information to employees through labels, MSDSs, and formal training programs

#### How can workplace hazards be minimized?

- The first step in minimizing workplace hazards is to perform a thorough hazard assessment
- Employers can rely on the evaluations performed by the manufacturers or importers to establish the hazards of the chemicals they use
  - This information is obtained from MSDSs and labels

### Why is a written program required?

- Ensures that all employers receive the information they need to inform and train their employees
- Provides necessary hazard information to employees



# Written HazCom Program Requirements

- Describes container labeling, MSDSs, and employee training for each workplace
- List of the hazardous chemicals
- Make information regarding hazards and protective measures available to other employers onsite

#### How must chemicals be labeled?

Each container of hazardous chemicals entering the workplace must be labeled or marked with:

- Identity of the chemical
- Appropriate hazard warnings
- Name and address of the responsible party



# Container Labeling in the Workplace

- The hazard warning can be any type of message, picture, or symbol that provides information on the hazards of the chemical(s) and the targeted organs affected, if applicable
- Labels must be legible, in English (plus other languages, if desired), and prominently displayed



# **Material Safety Data Sheets**

Prepared by the chemical manufacturer or importer and describe:

- Physical hazards, such as fire and explosion
- Health hazards, such as signs of exposure
- Routes of exposure
- Precautions for safe handling and use
- Emergency and first-aid procedures
- Control measures

# Material Safety Data Sheets (cont'd)

- Must be in English and include information regarding the specific chemical identity and common names
- Must provide information about the:
  - Physical and chemical characteristics
  - Health effects
  - Exposure limits
  - Carcinogenicity (cancer-causing)
  - Identification (name, address, and telephone number) of the organization responsible for preparing the sheet
- Must be readily accessible to employees in their work area

### Material Safety Data Sheets (cont'd)

- MSDSs have no prescribed format
- If no MSDS has been received for a hazardous chemical, employer must contact the supplier, manufacturer, or importer to obtain one and maintain a record of the contact

Material Safety Data Sheet	U.S. Dep	artment of Lat	oor	//.
May be used to comply with		Safety and Health		<b>(</b> (*)
OSHA's Hazard Communication Standard,	(Non-Manda			<b>W</b>
29 CFR 1910,1200. Standard must be	Form Appro			
consulted for specific requirements.	OMB No. 12			
IDENTITY (As Used on Label and List)	Note: Blank sp informati	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that:		
Section I				
Manufacturer's Name		lephone Number		
Address (Number, Street, City, State, and ZIP Code)		mber for Information		
	Date Prepared			
	Signature of P	reparer (optional)		
Section II — Hazardous Ingredients/Identity	Information			
Hazardous Components (Specific Chemical Identity; Com	mon Name(s)) OSHA PEL	ACGIH TLV	Other Limits Recommended	% (option
Section III — Physical/Chemical Characteris	stics			
Section III — Physical/Chemical Characteris	stics   Specific Graw	y (H <sub>2</sub> O = 1)		
		y (H <sub>2</sub> O = 1)		
Boiling Point	Specific Gravi  Metting Point  Evaporation F	ate		
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)	Specific Gravi	ate		
Bolling Point  Vapor Pressure (mm Hg.)  Vapor Density (AR = 1)  Solubility in Water	Specific Gravi  Metting Point  Evaporation F	ate		
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)	Specific Gravi  Metting Point  Evaporation F	ate		
Bolling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  Appearance and Odor  Section IV — Fire and Explosion Hazard Di	Specific Gravi Meting Point Evaporation F (Butyl Acetate	ate - 1)		
Bolling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  Appearance and Odor	Specific Gravi Meting Point Evaporation R (Butyl Acetate	ate - 1)	LEL	UEL
Bolling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  Appearance and Odor  Section IV — Fire and Explosion Hazard Di	Specific Gravi Meting Point Evaporation F (Butyl Acetate	ate - 1)	LEL	UEL
Bolling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  Appearance and Odor  Section IV — Fire and Explosion Hazard Di Flash Point (Method Used)	Specific Gravi Meting Point Evaporation F (Butyl Acetate	ate - 1)	LEL	UEL
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  Appearance and Odor  Section IV — Fire and Explosion Hazard Di- Flash Point (Method Used)  Extinguishing Media	Specific Gravi Meting Point Evaporation F (Butyl Acetate	ate - 1)	LEL	UEL
Bolling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  Appearance and Odor  Section IV — Fire and Explosion Hazard Di  Flash Point (Method Used)  Extinguishing Media	Specific Gravi Meting Point Evaporation F (Butyl Acetate	ate - 1)	LEL	UEL
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  Appearance and Odor  Section IV — Fire and Explosion Hazard Di Flash Point (Method Used)  Entinguishing Media  Special Fire Flighting Procedures	Specific Gravi Meting Point Evaporation F (Butyl Acetate	ate - 1)	LEL	UEL

# **Training**

Training is required for employees who are exposed to hazardous chemicals in their work area:

- At the time of initial assignment
- Whenever a new hazard is introduced into their work area



# What training is needed to protect workers?

- Explanation of the HazCom program, including information on labels, MSDSs, and how to obtain and use available hazard information
- Hazards of chemicals
- Protective measures such as engineering controls, work practices, and the use of PPE
- How to detect the presence or release of a hazardous chemical (using monitoring devices, observation, or smell)

# What information must be provided to workers?

#### Employees must be informed of:

- The HazCom standard and its requirements
- Operations in their work areas where hazardous chemicals are present
- Location and availability of the written hazard evaluation procedures, communications program, lists of hazardous chemicals, and the required MSDSs

# Summary

- OSHA's Hazard Communication Standard is based on a simple concept - that employees have both a need and a right to know the hazards and identities of the chemicals they are exposed to when working
- Employees also need to know what protective measures are available to prevent adverse effects from occurring

### **AFD Haz Comm Notebooks**



- Alpha listing of chemicals at respective stations
- Alpha files MSDSs
- Notebook on top of file cabinet at HQ
- Notebook in drawer of Radio Room at Station 2

# AFD Haz Comm SOG II, 2.0

- Provide list of chemical and MSDSs
- All chemical containers to have proper labels
- Battalion Chiefs responsible for identifying and providing specialized training needs, including new personnel
- Training on new chemicals as needed
- Contractors bringing chemicals on-site must provide MSDS and training as needed