

HAZARD COMMUNICATION



EMPLOYEE

“RIGHT-TO-KNOW”



HAZARD COMMUNICATION

8 CCR 5194



- Protect employees from hazardous chemicals.
- Inform employees about chemical hazards
- Precautions and protective measures when using, handling and contacting chemicals.
- Is one of the most cited Cal/OSHA standard

PROGRAM REQUIREMENTS

- Written Program
- Material Safety Data Sheets (MSDS)
- Labeling
- Chemical Inventory
- Training
- Recordkeeping



HAZARD
COMMUNICATION
PROGRAM

LAUSD HAZARD COMMUNICATION PROGRAM

Requires:

- Approval from the Office of Environmental Health and Safety for all chemical products. Develop and annually update the chemical inventory list.
- Keep Material Safety Data Sheets (MSDS) for each chemical.



LAUSD HAZARD COMMUNICATION PROGRAM

Requires:

- All containers are properly labeled.
- Hazard communication training
- Re-training for employees when new hazards are introduced.
- Document hazard communication training.



EMPLOYEE TRAINING



Training shall include the following:

- Explanation of the Hazard Communication Program.
- An explanation of MSDS and how to access an MSDS.
- Chemicals or class of substance used on site.
- Location of work areas using hazardous products.
- Observation and detection methods utilized for hazards.
- Specific hazards and protective measures needed.
- Explanation of the labeling system used.

EMPLOYEE TRAINING

All District employees must receive hazard communication training:

- At the time of initial assignment.
- Prior to initial new assignments involving chemicals.
- Prior to performance of hazardous, non-routine tasks.

EMPLOYEE TRAINING

Training will be provided at in-service training or special safety training by:

- Site Administrators or designee
- Supervisors
- Chemical Safety Coordinators (at secondary school sites)
- Office of Environmental Health and Safety personnel

EMPLOYEE TRAINING

All employee training must be documented.

Site administrators or supervisors must:

- Use sign in sheets to document training.
- Keep training sign in sheets on file for 5 years.

HAZARD TERMS





- Corrosives
- Flammables
- Explosives
- Pressure
- Toxicity



HAZARD DEFINITION AND TERMS

Routes of Entry

Chemicals may enter the body in four ways:

-  Inhalation (breathing)
-  Ingestion (swallowing)
-  Absorption through the skin
-  Injection

HAZARD DEFINITION AND TERMS

Dose and Dose Effects

- Dose. The amount of the material exposed to.
- The dose effects depend on the concentration
- **Acute effect.**
- **Chronic effect.**

MATERIAL SAFETY DATA SHEET

Material Safety Data Sheets (MSDS) provide detailed health and safety information and precautions for handling hazardous substances, including emergency and first aid procedures.

MATERIAL SAFETY DATA SHEETS

- Identity of the chemical or product
- Hazardous ingredients
- Physical/chemical characteristics
- Fire and explosion hazards
- Reactivity data
- Health hazards
- Precautions for safe handling and use
- Control measures

MATERIAL SAFETY DATA SHEETS

- Section I – Product Identification

I. PRODUCT IDENTIFICATION
Trade Name
Other Identifying Chemical Names
Manufacturer's Name
Address
Phone/Emergency Phone
Date Prepared or Revised

MATERIAL SAFETY DATA SHEETS

- Section II – Hazardous Ingredients

II. HAZARDOUS INGREDIENTS
Chemical Names
CAS Number
TLV – Threshold Limit Value
PEL – Permissible Exposure Limit

MATERIAL SAFETY DATA SHEETS

- Section III – Physical Properties

III. Physical Properties
Vapor Density (air=1)/ Specific Gravity
Warning Properties (i.e. gas, mist, vapor, dust)
Solubility in Water
Vapor Pressure
Appearance and Odor/PH
Melting/ Boiling Point

MATERIAL SAFETY DATA SHEETS

- Section IV – Fire and Explosion

IV. Fire and Explosion
Flash Point
Flammability
Lower and Upper Explosion Level
Fire Extinguisher Type and Media
Special firefighting procedures
Unusual fire and explosion hazards

FIRE AND EXPLOSION

Terms:

- Flash point – ignition temperature.
- Flammable – ignites below 100 degrees.
- Combustible – Ignites above 100 degrees.

MATERIAL SAFETY DATA SHEETS

- Section V – Health Hazard Information

V. Health Hazard Information
Symptoms of Overexposure/Route of Entry
Health Effects or Risks
Medical Conditions
Potential or Suspect Carcinogen
First Aid
Emergency Procedures

HEALTH HAZARDS cont.

This section also identifies:

- The route of entry or exposure
- Health effects
- Regulated carcinogens
- Emergency procedures

MATERIAL SAFETY DATA SHEETS

- Section VI – Reactivity Data

VI. Reactivity Data
Stability
Conditions to avoid
Incompatibility
Hazardous decomposition

REACTIVE CHEMICALS



An example of incompatible chemicals is bleach and ammonia.



MATERIAL SAFETY DATA SHEETS

- Section VII – Spill, Leak and Disposal Procedures

VII. Spill, Leak and Disposal Procedures
Spill response procedures
Preparing wastes for disposal

HAZARDOUS MATERIAL SPILLS

In the event of a chemical spill:

- Evacuate and prevent access to area.
- Notify the site administrator.
- Do not ask untrained individuals to clean up.
- Call the OEHS (213) 241-3199.

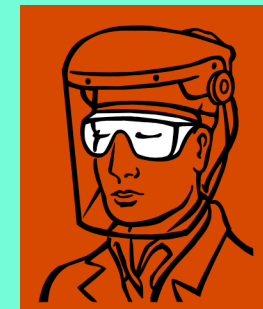
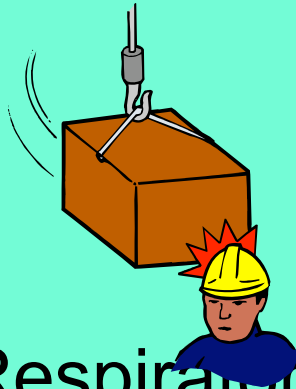
MATERIAL SAFETY DATA SHEETS

- Section VIII – Special Handling Information

VIII. Special Handling Information
Ventilation
Engineering Controls
Personal Protective Equipment
Safe Work Practices
Handling and Storage
Other Protective Measures

PERSONAL PROTECTIVE EQUIPMENT

- Hard Hats
- Gloves
- Coveralls
- Masks or Respirators
- Safety glasses or face shields



REVIEW

- You notice a strange odor when working with a new chemical. What section of the MSDS will provide information about odor?

Section III- Physical Properties

- You develop a skin rash while working with a chemical. What section of the MSDS will tell you about the affects of overexposure?



Section V- Health Hazards

- What section describes safe work practices for chemical products?

Section VIII- Special Handling Information. This section lists personal protective equipment, ventilation requirements and other safe work practices.



LABELS

Methyl Ethyl Death
 Chemman, Inn
 Somewhere, USA
 (555)555 3555





Danger:


- Extremely Flammable
- Poison
- Reacts Violently with Water


Flammable




Explosive




Oxidizer




Corrosive




Water Reactive



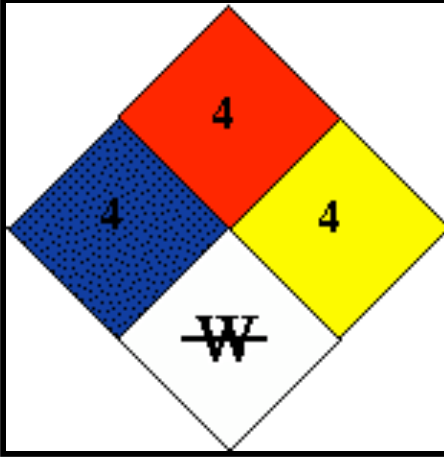
Toxic



Radioactive



Carcinogenic



	HEALTH
	FLAMMABILITY
	REACTIVITY
	PROTECTIVE EQUIPMENT

LABELS

Labels should have

- Chemical Name or alternative or synonym name
- Warning Statement
- Caution Phrases
- Precautionary Statements
- First Aid Information



LABELS

METHANOL (Methyl Alcohol)

DANGER!



FLAMMABLE



POISON

Vapor Harmful.

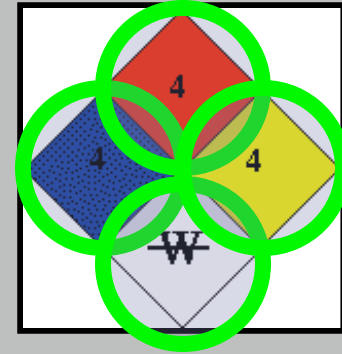
May Be Fatal If Swallowed

Keep away from heat, sparks, open flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

IMMEDIATELY CALL POISON CONTROL CENTER OR 911.

IF SWALLOWED. Give a tablespoon of salt in a glass of warm water and repeat until vomit fluid is clear.

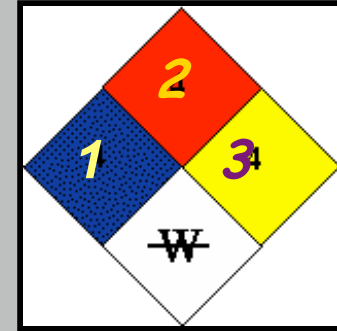
LABELS



The National Fire Protection Association (NFPA) utilizes a diamond divided into four color coded sections:

- Blue - Health Hazard
- Red - Flammability
- Yellow - Reactivity Hazard
- White - Other Hazard Information

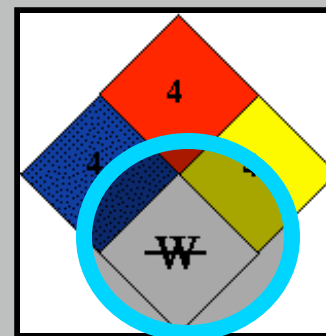
LABELS



Within each section, a number ranks the degree of hazard:

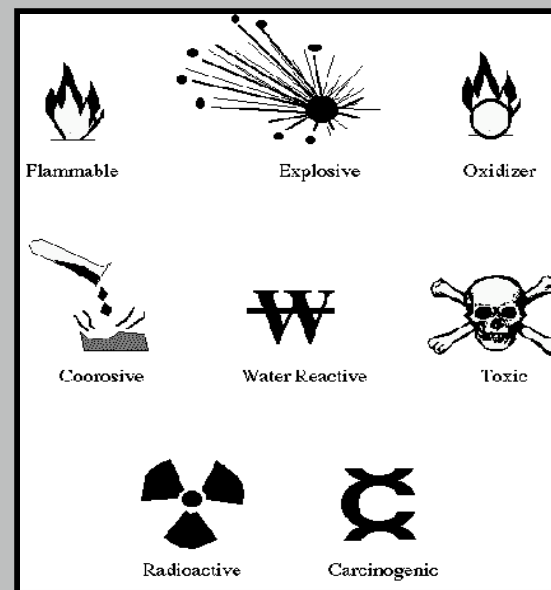
- 0 - No or Minimal Hazard
- 1 - Slight Hazard
- 2 - Moderate Hazard
- 3 - Serious Hazard
- 4 - Extreme Hazard

LABELS



The white section alerts the user to special hazards that material may possess, such as

- Water reactivity
- Strong oxidizer
- Corrosivity
- Radioactivity



LABELS

The Hazardous Material Identification System (HMIS) is similar to the NFPA. The color and numbering code are identical. HMIS use a color bar system with ranking for the level of protection:



REVIEW

- What color indicates fire or explosive hazards?

Red

- Name a “caution phrase” that may be found on a chemical label.

Flammable, Toxic, Corrosive, Highly Volatile, Avoid Breathing Vapors

SUMMARY POINTS

- Consult your supervisor.
- Read all safety instructions and labels
- Maintain safety equipment and tools

SUMMARY POINTS

- Wear personal protective equipment
- Know what to do in an emergency.
- Know storage and waste requirements
- Understand and obey the safety rules

SUMMARY POINTS

Take safety home with you. The average home is less safe than the average job.

OTHER REQUIRED EMPLOYEE HEALTH AND SAFETY TRAINING

Other required employee training includes:

- Injury and Illness Prevention Program, 8 CCR, Section 3203.
- Bloodborne Pathogens Training, 8 CCR, Section 5194.
- Chemical Hygiene Plan, 8 CCR, Section 5191 (for secondary schools with chemical laboratories).

HEALTH AND SAFETY TRAINING

For more information on employee health and safety, call the Office of Environmental Health and Safety at (213) 241-3199.

PROGRAM END

You have finished the hazard communication training. Please discuss with your supervisor:

- Any chemical exposure relating to your job.
- The location and availability of MSDS.
- Questions about chemical exposure
- Personal protective equipment required