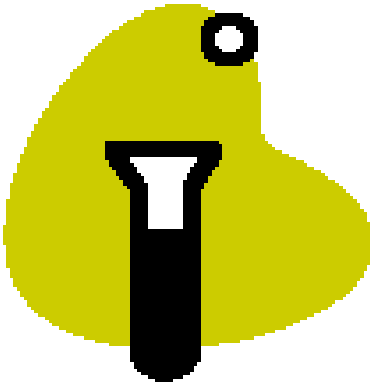




# HAZARD COMMUNICATION



EMPLOYEE  
"RIGHT –TO –KNOW"  
LAW

2014



# HAZARD COMMUNICATION

## 8 CCR 5194



- Protects employees from hazardous chemicals.
- Informs employees about chemical hazards.
- Provides precautions and protective measures when using, handling and contacting chemicals.



# HAZARD COMMUNICATION



## 8 CCR 5194

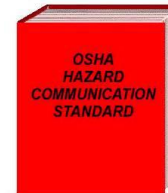
### PROGRAM REQUIREMENTS

- Written Hazard Communication Program
- Safety Data Sheets (SDSs)
- Labeling of containers
- Chemical Inventory
- Training
- Recordkeeping





# HAZARD COMMUNICATION STANDARD



- In February 1983, California's Hazard Communication Standard was enacted, requiring employers and manufacturers to make chemical information and training available to all employees using hazardous substances.
- The act, more commonly known as California's Right-To-Know Law, was revised in 1985 to include several provisions of the Federal Hazard Communication Standard. The revised standard expanded the scope of California's original law by increasing the number of substances considered hazardous.
- It was then again revised in 2013 to conform to the United Nations' (UN) globally harmonized system (GHS) of classification and labeling of chemicals.



# WHAT IS THE GLOBALLY HARMONIZED SYSTEM (GHS)?

- An international approach to hazard communication.
- Provides a standardized approach to labeling and safety data sheets (formerly MSDSs).
- Is based on major systems around the world, including OSHA's Hazard Communication Standard and the chemical classification and labeling systems of other US agencies.





# HAZARD COMMUNICATION STANDARD



**The major changes to the Hazard Communication Standard (HCS) as a result of the implementation of the GHS are:**

- **Hazard Classification:** The definitions of hazard have been changed to provide specific criteria for classification of health and physical hazard, as well as classification of mixtures. These specific criteria will help to ensure that evaluations of hazardous effects are consistent across manufacturers, and labels and safety data sheets are more accurate as a result.
- **Labels:** Chemical manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram and hazard statement for each hazard class and category. Precautionary statement must also be provided.
- **Safety Data Sheets:** Will have a universal 16 section format.
- **Information and training:** The Final HCS will require that workers are trained within two years of the publication of the final rule to facilitate recognition and understanding of the new labels and safety data sheets.



# HAZARD COMMUNICATION

## STANDARD FINAL RULE



### Effective Dates:

**12/1/13:** All employees must be trained on new label elements and SDS format.

**6/1/15:** Manufacturers and distributors must comply with all modified provisions except that distributors have until 12/1/15 to provide revised labels for all products shipped.

**6/1/16:** OSHA enforcement starts: Employers must update all labels and HAZCOM program, provide additional training for workers on newly identified physical or health hazards. During transition period, employers can comply with old or new standard as far as labels and SDSs.



## HAZARD COMMUNICATION PROGRAM

Requires:

- Approval from the Office of Environmental Health and Safety for all chemical products.
- Development of chemical inventory list for each site, with annual updates.
- Maintaining Safety Data Sheets (SDSs) onsite for each chemical used or stored at the school/facility.







# LAUSD

## HAZARD COMMUNICATION PROGRAM

Requires:

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



# HAZARD COMMUNICATION STANDARD SAFETY DATA SHEETS



- The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products. The information contained in the SDS is largely similar to the MSDS, except now the SDSs are required to be presented in a consistent 16-section format.
- Safety Data Sheets (SDS) provide detailed health and safety information and precautions for handling, storing and transporting hazardous substances, including emergency and first aid procedures. All SDSs must contain information required by Appendix D to §1910.1200 (See Appendix A).



# HAZARD COMMUNICATION STANDARD SAFETY DATA SHEETS



- The Right-to-Know Law requires hazardous substance manufacturers to develop SDSs for substances they produce or import. The District is required to provide and maintain these data sheets at each work location. Safety Data Sheets must be downloaded from the OEHS website at each site and placed in binders entitled, "Hazard Communication and Your Right-To-Know, or Material Safety Data Sheets" for specific operations.
- Sections 1 through 8 contain general information about the chemical, identification, hazards, composition, safe handling practices, and emergency control measures (e.g., fire fighting).



# HAZARD COMMUNICATION STANDARD



## SAFETY DATA SHEETS (CONT.)



- Sections 9 through 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 through 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.



# SAFETY DATA SHEETS

## SDS



The following are the descriptions of all 16 sections of the SDS, along with their contents:

### Section 1: Identification

This section identifies the chemical on the SDS as well as the recommended uses. It also provides the essential contact information of the supplier. The required information consists of:

- Product identifier used on the label and any other common names or synonyms by which the substance is known.
- Name, address, phone number of the manufacturer, importer, or other responsible party, and emergency phone number.
- Recommended use of the chemical (e.g., a brief description of what it actually does, such as flame retardant) and any restrictions on use (including recommendations given by the supplier).



# SAFETY DATA SHEETS

## SDS (CONT.)

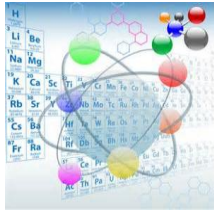


### Section 2: Hazard(s) Identification

This section identifies the hazards of the chemical presented on the SDS and the appropriate warning information associated with those hazards. The required information consists of:

- The hazard classification of the chemical (e.g., flammable liquid, category<sup>1</sup>).
- Signal word.
- Hazard statement(s).
- Pictograms (the pictograms or hazard symbols may be presented as graphical reproductions of the symbols in black and white or be a description of the name of the symbol (e.g., skull and crossbones, flame).
- Precautionary statement(s).
- Description of any hazards not otherwise classified.
- For a mixture that contains an ingredient(s) with unknown toxicity, a statement describing how much (percentage) of the mixture consists of ingredient(s) with unknown acute toxicity. Please note that this is a total percentage of the mixture and not tied to the individual ingredient(s).





# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 3: Composition/Information on Ingredients

This section identifies the ingredient(s) contained in the product indicated on the SDS, including impurities and stabilizing additives. This section includes information on substances, mixtures, and all chemicals where a trade secret is claimed. The required information consists of:

#### Substances

- Chemical name.
- Common name and synonyms.
- Chemical Abstracts Service (CAS) number and other unique identifiers.
- Impurities and stabilizing additives, which are themselves classified and which contribute to the classification of the chemical.

#### Mixtures

- Same information required for substances.
- The chemical name and concentration (i.e., exact percentage) of all ingredients which are classified as health hazards and are:
  - Present above their cut-off/concentration limits or
  - Present a health risk below the cut-off/concentration limits.
- The concentration (exact percentages) of each ingredient must be specified except concentration ranges may be used in the following situations:
  - A trade secret claim is made,
  - There is batch-to-batch variation, or
  - The SDS is used for a group of substantially similar mixtures.

#### Chemicals where a trade secret is claimed

- A statement that the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret is required.





# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 4: First-Aid Measures

This section describes the initial care that should be given by untrained responders to an individual who has been exposed to the chemical. The required information consists of:

- Necessary first-aid instructions by relevant routes of exposure (inhalation, skin and eye contact, and ingestion).
- Description of the most important symptoms or effects, and any symptoms that are acute or delayed.
- Recommendations for immediate medical care and special treatment needed, when necessary.

**SAFETY**



FIRST AID





# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 5: Fire-Fighting Measures

This section provides recommendations for fighting a fire caused by the chemical. The required information consists of:

- Recommendations of suitable extinguishing equipment, and information about extinguishing equipment that is not appropriate for a particular situation.
- Advice on specific hazards that develop from the chemical during the fire, such as any hazardous combustion products created when the chemical burns.
- Recommendations on special protective equipment or precautions for firefighters.





# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 6: Accidental Release Measures

This section provides recommendations on the appropriate response to spills, leaks, or releases, including containment and cleanup practices to prevent or minimize exposure to people, properties, or the environment. It may also include recommendations distinguishing between responses for large and small spills where the spill volume has a significant impact on the hazard. The required information may consist of recommendations for:

- Use of personal precautions (such as removal of ignition sources or providing sufficient ventilation) and protective equipment to prevent the contamination of skin, eyes, and clothing.
- Emergency procedures, including instructions for evacuations, consulting experts when needed, and appropriate protective clothing.
- Methods and materials used for containment (e.g., covering the drains and capping procedures).
- Cleanup procedures (e.g., appropriate techniques for neutralization, decontamination, cleaning or vacuuming; adsorbent materials; and/or equipment required for containment/clean up).



Haz  
Mo  
**Personal Protective  
Equipment (PPE)**





# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 7: Handling and Storage

This section provides guidance on the safe handling practices and conditions for safe storage of chemicals. The required information consists of:

- Precautions for safe handling, including recommendations for handling incompatible chemicals, minimizing the release of the chemical into the environment, and providing advice on general hygiene practices (e.g., eating, drinking, and smoking in work areas is prohibited).
- Recommendations on the conditions for safe storage, including any incompatibilities. Provide advice on specific storage requirements (e.g., ventilation requirements).





# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 8: Exposure Controls/Personal Protection

This section indicates the exposure limits, engineering controls, and personal protective measures that can be used to minimize worker exposure. The required information consists of:

- OSHA Permissible Exposure Limits (PELs), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.
- Appropriate engineering controls (e.g., use local exhaust ventilation, or use only in an enclosed system).
- Recommendations for personal protective measures to prevent illness or injury from exposure to chemicals, such as personal protective equipment (PPE) (e.g., appropriate types of eye, face, skin or respiratory protection needed based on hazards and potential exposure).
- Any special requirements for PPE, protective clothing or respirators (e.g., type of glove material, such as PVC or nitrile rubber gloves; and breakthrough time of the glove material).





# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 9: Physical and Chemical Properties

This section identifies physical and chemical properties associated with the substance or mixture. The minimum required information consists of:

- Appearance (physical state, color, etc.);
- Odor;
- Odor threshold;
- pH;
- Melting point/freezing point;
- Initial boiling point and boiling range;
- Flash point;
- Evaporation rate;
- Flammability (solid, gas);
- Upper/lower flammability or explosive limits;
- Vapor pressure;
- Vapor density;
- Relative density;
- Solubility(ies);
- Partition coefficient: n-octanol/water;
- Auto-ignition temperature;
- Decomposition temperature; and
- Viscosity.

The SDS may not contain every item on the above list because information may not be relevant or is not available. When this occurs, a notation to that effect must be made for that chemical property. Manufacturers may also add other relevant properties, such as the dust deflagration index (Kst) for combustible dust, used to evaluate a dust's explosive potential.



# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 10: Stability and Reactivity

This section describes the reactivity hazards of the chemical and the chemical stability information. This section is broken into three parts: reactivity, chemical stability, and other. The required information consists of:

#### Reactivity

- Description of the specific test data for the chemical(s). This data can be for a class or family of the chemical if such data adequately represent the anticipated hazard of the chemical(s), where available.

#### Chemical stability

- Indication of whether the chemical is stable or unstable under normal ambient temperature and conditions while in storage and being handled.
- Description of any stabilizers that may be needed to maintain chemical stability.
- Indication of any safety issues that may arise should the product change in physical appearance.

#### Other

- Indication of the possibility of hazardous reactions, including a statement whether the chemical will react or polymerize, which could release excess pressure or heat, or create other hazardous conditions. Also, a description of the conditions under which hazardous reactions may occur.
- List of all conditions that should be avoided (e.g., static discharge, shock, vibrations, or environmental conditions that may lead to hazardous conditions).
- List of all classes of incompatible materials (e.g., classes of chemicals or specific substances) with which the chemical could react to produce a hazardous situation.
- List of any known or anticipated hazardous decomposition products that could be produced because of use, storage, or heating. (Hazardous combustion products should also be included in Section 5 (Fire-Fighting Measures) of the SDS.)



# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 11: Toxicological Information

This section identifies toxicological and health effects information or indicates that such data are not available. The required information consists of:

- Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact). The SDS should indicate if the information is unknown.
- Description of the delayed, immediate, or chronic effects from short- and long-term exposure.
- The numerical measures of toxicity (e.g., acute toxicity estimates such as the LD50 (median lethal dose)) - the estimated amount [of a substance] expected to kill 50% of test animals in a single dose.
- Description of the symptoms. This description includes the symptoms associated with exposure to the chemical including symptoms from the lowest to the most severe exposure.
- Indication of whether the chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA.



# Safety Data Sheets (SDS)



## Section 12: Ecological Information (non-mandatory)

This section provides information to evaluate the environmental impact of the chemical(s) if it were released to the environment. The information may include:

- Data from toxicity tests performed on aquatic and/or terrestrial organisms, where available (e.g., acute or chronic aquatic toxicity data for fish, algae, crustaceans, and other plants; toxicity data on birds, bees, plants).
- Whether there is a potential for the chemical to persist and degrade in the environment either through biodegradation or other processes, such as oxidation or hydrolysis.
- Results of tests of bioaccumulation potential, making reference to the octanol-water partition coefficient ( $K_{ow}$ ) and the bioconcentration factor (BCF), where available.
- The potential for a substance to move from the soil to the groundwater (indicate results from adsorption studies or leaching studies).
- Other adverse effects (e.g., environmental fate, ozone layer depletion potential, photochemical ozone creation potential, endocrine disrupting potential, and/or global warming potential).





# Safety Data Sheets (SDS)



## Section 13: Disposal Considerations (non-mandatory)

This section provides guidance on proper disposal practices, recycling or reclamation of the chemical(s) or its container, and safe handling practices. To minimize exposure, this section should also refer the reader to Section 8 (Exposure Controls/Personal Protection) of the SDS. The information may include:

- Description of appropriate disposal containers to use.
- Recommendations of appropriate disposal methods to employ.
- Description of the physical and chemical properties that may affect disposal activities.
- Language discouraging sewage disposal.
- Any special precautions for landfills or incineration activities.



HAZARDOUS WASTE	
FEDERAL LAW PROHIBITS IMPROPER DISPOSAL. IF FOUND, CONTACT THE NEAREST POLICE OR PUBLIC SAFETY AUTHORITY OR THE U.S. ENVIRONMENTAL PROTECTION AGENCY. GENERATOR INFORMATION:	
NAME _____	PHONE _____
ADDRESS _____	CITY _____ STATE _____ ZIP _____
EPA / MANIFEST ID NO. / DOCUMENT NO. _____	EPA ACCUMULATION START DATE _____ WASTE NO. _____
IF NOT PROPER SHIPPING NAME AND UN OR NA ID, WITH PREFIX <b>HANDLE WITH CARE!</b>	



# Safety Data Sheets (SDS)



## Section 14: Transport Information (non-mandatory)

This section provides guidance on classification information for shipping and transporting of hazardous chemical(s) by road, air, rail, or sea. The information may include:

- UN number (i.e., four-figure identification number of the substance)<sup>2</sup>.
- UN proper shipping name<sup>2</sup>.
- Transport hazard class(es)<sup>2</sup>.
- Packing group number, if applicable, based on the degree of hazard<sup>2</sup>.
- Environmental hazards (e.g., identify if it is a marine pollutant according to the International Maritime Dangerous Goods Code (IMDG Code)).
- Guidance on transport in bulk (according to Annex II of MARPOL 73/78<sup>3</sup> and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code (IBC Code))).
- Any special precautions which an employee should be aware of or needs to comply with, in connection with transport or conveyance either within or outside their premises (indicate when information is not available).





# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 15: Regulatory Information (non-mandatory)

This section identifies the safety, health, and environmental regulations specific for the product that is not indicated anywhere else on the SDS. The information may include:

- Any national and/or regional regulatory information of the chemical or mixtures (including any OSHA, Department of Transportation, Environmental Protection Agency, or Consumer Product Safety Commission regulations).



# SAFETY DATA SHEETS

## SDS (CONT.)



### Section 16: Other Information

This section indicates when the SDS was prepared or when the last known revision was made. The SDS may also state where the changes have been made to the previous version. You may wish to contact the supplier for an explanation of the changes. Other useful information also may be included here.





# SAFETY DATA SHEETS

## SDS (CONT.)



### Employer Responsibilities

- Ensure that the SDSs are readily accessible to employees for all hazardous chemicals in their workplace. This may be done in many ways. For example, employers may keep the SDSs in a binder or on computers as long as the employees have immediate access to the information without leaving their work area when needed and a back-up is available for rapid access to the SDS in the case of a power outage or other emergency.
- Furthermore, employers may want to designate a person(s) responsible for obtaining and maintaining the SDSs. If the employer does not have an SDS, the employer or designated person(s) should contact the manufacturer to obtain one.





# Hazard Communication Standard Labels



## Label Requirements

- Labels, as defined in the HCS, are an appropriate group of written, printed or graphic informational elements concerning a hazardous chemical that are affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.



# HAZARD COMMUNICATION STANDARD LABELS



- OSHA has updated the requirements for labeling of hazardous chemicals under its Hazard Communication Standard (HCS). The HCS requires chemical manufacturers, importers, or distributors to ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged or marked,

## **Labels for a hazardous chemical must contain:**

- Name, Address and Telephone Number
- Product Identifier
- Signal Word
- Hazard Statement(s)
- Precautionary Statement(s)
- Pictogram(s)



# HAZARD COMMUNICATION

## STANDARD LABELS (CONT.)



### Workplace Labels

- OSHA has not changed the general requirements for workplace labeling.
- Labels must be legible and fade resistant or not easily removed in anyway.
- Employers have the option to create their own workplace labels.
- Employers are not responsible to update labels on shipped containers however, must re-label items if the labels are removed or defaced.
- Workplace labels can either provide all required information on the original chemical manufacturer's label or, the product identifier and words, pictures, symbols or a combination of these.





# HAZARD COMMUNICATION STANDARD LABELS (CONT.)



## Workplace Labels

- If the employer is aware of newly-identified hazards that are not disclosed on the label, the employer must ensure that the workers are informed.
- Employers may continue to use rating systems such as National Fire Protection Association (NFPA) diamonds or HMIS requirements for workplace labels as long as they are consistent with the requirements of the Hazard Communication Standard and the employees have immediate access to the specific hazard.





# HAZARD COMMUNICATION

## STANDARD LABELS (CONT.)



Labels must be legible, in English, and prominently displayed. Other languages may be displayed in addition to English. Chemical manufacturers, importers, and distributors who become newly aware of any significant information regarding the hazards of a chemical must revise the label within six months.

SAMPLE LABEL	
<b>CODE</b> _____ <b>Product Name</b> _____	<b>Product Identifier</b>
<b>Company Name</b> _____ <b>Street Address</b> _____ <b>City</b> _____ <b>State</b> _____ <b>Postal Code</b> _____ <b>Country</b> _____ <b>Emergency Phone Number</b> _____	<b>Supplier Identification</b>
<b>Hazard Pictograms</b>	
 	
<b>Signal Word</b> <b>Danger</b>	
<p>Keep container tightly closed. Store in a cool, well-ventilated place that is locked. Keep away from heat/sparks/open flame. No smoking. Only use non-sparking tools. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Ground and bond container and receiving equipment. Do not breathe vapors. Wear protective gloves. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Dispose of in accordance with local, regional, national, international regulations as specified.</p> <p><b>In Case of Fire:</b> use dry chemical (BC) or Carbon Dioxide (CO<sub>2</sub>) fire extinguisher to extinguish.</p> <p><b>First Aid</b> If exposed call Poison Center. If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.</p>	<p><b>Hazard Statements</b> Highly flammable liquid and vapor. May cause liver and kidney damage.</p>
<b>Precautionary Statements</b>	
<b>Supplemental Information</b>	
<b>Directions for Use</b> _____ _____	
Fill weight: _____ Lot Number: _____ Gross weight: _____ Fill Date: _____ Expiration Date: _____	



# HAZARD COMMUNICATION STANDARD LABELS (CONT.)



## To create an OSHA label per HazCom 2012:

**Step 1:** Perform the classification in accordance with Appendix A: Health Hazards & Appendix B Physical Hazards of 29 CFR 1910.1200 — this is where you find the criteria for each hazard class and hazard category.

Class: Flammable Gas, Category 1




Class: Carcinogen, Category 1B

Class: Specific Target Organ Toxicity (Single Exposure), Category 3

Class: Substances and Mixtures Which, in Contact with Water, Emit Flammable Gases, Category 3

**Step 2:** Gather labeling information (Pictograms, Signal Word, Hazard Statements) from Appendix C of 29 CFR 1910.1200 based on the chemical's hazard class and category.

**Step 3:** Create the Label

Identifier: NOMIXUP 7042012	
  	
DANGER!	
Hazard Statements:	Extremely Flammable Gas May Cause Cancer May Cause Respiratory Irritation In Contact with Water Releases Flammable Gas
Precautionary Statements:	Keep away from heat/sparks/open flames/hot surfaces—No Smoking Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing vapors and mists. Wear protective gloves and eye protection. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call poison center/doctor if you feel unwell. Leaking Gas Fire: Do not extinguish unless leak can be stopped safely. Eliminate all ignition sources if safe to do so. Store in tightly closed container in a well-ventilated place, locked up. Use outdoors or use in a well-ventilated place. Dispose of contents in accordance with local/regional/national regulations.
XYZ Chemical Company 123 Main St. Anywhere, NY, USA 1-800-000-1111	



# HAZARD COMMUNICATION STANDARD LABELS (CONT.)



## To Create NFPA 704 label:

**Step 1:** Collect information on hazards from applicable sections of SDS. Some SDSs may provide the NFPA diamond symbol with hazard rating numbers filled in already. **Note: Do NOT use the hazard category numbers given in section 2 of HazCom 2012 compliant SDS on 704 label!**

If the diamond is not provided on the SDS you can obtain the information under the following sections of the SDS. Note that additional information may be provided in other sections of the SDS.

- Health hazard information under Section 11
- Flammability information under Section 9
- Instability information under Section 10
- Special information under Section 9, 10, 11



**Step 2:** Obtain current edition copy of NFPA 704 or view on line at [www.nfpa.org/704](http://www.nfpa.org/704). Compare the criteria on the SDS sections as shown above with the criteria shown in Tables 5.2 (Health), 6.2 (Flammability), 7.2 (Instability) and 8.2 (Special Hazards).

**Step 3:** Place numbers for the degree of hazard associated with the criteria obtained in Step 2 in the correct quadrant of NFPA 704 placard.



# HAZARD COMMUNICATION STANDARD PICTOGRAM












As of June 1, 2015, the Hazard Communication Standard (HCS) will require pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.



# HAZARD COMMUNICATION

## STANDARD PICTOGRAM (CONT.)

### HCS Pictograms and Hazards

<b>Health Hazard</b>  <ul style="list-style-type: none"><li>• Carcinogen</li><li>• Mutagenicity</li><li>• Reproductive Toxicity</li><li>• Respiratory Sensitizer</li><li>• Target Organ Toxicity</li><li>• Aspiration Toxicity</li></ul>	<b>Flame</b>  <ul style="list-style-type: none"><li>• Flammables</li><li>• Pyrophorics</li><li>• Self-Heating</li><li>• Emits Flammable Gas</li><li>• Self-Reactives</li><li>• Organic Peroxides</li></ul>	<b>Exclamation Mark</b>  <ul style="list-style-type: none"><li>• Irritant (skin and eye)</li><li>• Skin Sensitizer</li><li>• Acute Toxicity (harmful)</li><li>• Narcotic Effects</li><li>• Respiratory Tract Irritant</li><li>• Hazardous to Ozone Layer (Non-Mandatory)</li></ul>
<b>Gas Cylinder</b>  <ul style="list-style-type: none"><li>• Gases Under Pressure</li></ul>	<b>Corrosion</b>  <ul style="list-style-type: none"><li>• Skin Corrosion/ Burns</li><li>• Eye Damage</li><li>• Corrosive to Metals</li></ul>	<b>Exploding Bomb</b>  <ul style="list-style-type: none"><li>• Explosives</li><li>• Self-Reactives</li><li>• Organic Peroxides</li></ul>
<b>Flame Over Circle</b>  <ul style="list-style-type: none"><li>• Oxidizers</li></ul>	<b>Environment (Non-Mandatory)</b>  <ul style="list-style-type: none"><li>• Aquatic Toxicity</li></ul>	<b>Skull and Crossbones</b>  <ul style="list-style-type: none"><li>• Acute Toxicity (fatal or toxic)</li></ul>



# EMPLOYEE TRAINING



Training shall include the following:

- An explanation of the Hazard Communication Program.
- An explanation of SDSs and how to access an SDS.
- A review of chemicals used on site.
- A review of the locations of work areas using hazardous products.
- Identification of hazards associated with the use of chemicals.
- A review of protective measures required for specific hazards.
- An explanation of the labeling system used.



# EMPLOYEE TRAINING(CONT.)



All District employees must receive hazard communication training:

- Annually or at time of initial assignment.
- Prior to beginning new assignments involving chemicals.
- Prior to performance of hazardous, non-routine tasks.
- When the employer becomes aware of newly-identified chemicals hazards that were not disclosed on labels or SDS.







# EMPLOYEE TRAINING (CONT.)

Training will be provided at in-service or professional development meetings by:

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





# RECORDKEEPING



- 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 at the site for 3 years.
- Submit copies of all sign-in sheets to OEHS.



# Questions?

