

OSHA's Revised Hazard Communication
Standard:
New Requirements from the
"Globally Harmonized System"
(GHS)

October 16, 2015



GHS Compliance Dates

Effective Completion Date	Requirement(s)	Who
12/1/13	Train employees on new label elements & SDS format	Employers
6/1/15 12/1/15	Compliance with all modified provisions of this final rule, except: Distributors may ship products labeled by manufacturers under old system until 12/1/15	Chemical manufacturers, importers, distributors & employers
6/1/16	Update alternative workplace labeling & hazcom program as necessary, & provide additional employee training for newly identified physical or health hazards	Employers
Transition Period	May comply with either 1910.1200 (final standard), current standard, or both	Chemical manufacturers, importers, distributors & employers

Hazcom Requirements

- **Site Specific Written Program**
- **Chemical Inventory**
- **MSDs/SDSs**
- **Labeling**
- **Non-routine Tasks**
- **Contractors**
- **Training**



Definitions

- "Hazardous chemical" means any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

Definitions

- "Health hazard" means a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard.



Definitions

- **“Physical hazard” means a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas.**



Employer Responsibilities

The Hazard Communication Standard requires employers to:

- develop a written program/plan
- explain to employees how the program will be implemented
- provide employees with information and training on hazardous chemicals in their workplace
- provide employees with necessary resources to ensure that the program is implemented

HAZCOM Program

A written Hazard Communication program must describe the procedures for meeting all the requirements of the regulation, including:

- Developing and maintaining a list of the hazardous substances in the workplace. (Hazardous Chemical Inventory)
- An explanation of how the employer will meet requirements for:
 - Labeling of containers of hazardous substances and other forms of warning
 - SDSs and making sure they are readily accessible to employees and emergency responders
 - Employee training on hazardous substances they are or may be exposed to in their particular jobs during routine/non-routine work, or emergency situations

(Source: Guide to the California Hazard Communication Regulation, May 2012)

HAZCOM Program (continued)

- A plan for multi-employer workplace issues, if applicable, (contractors, multi-employer work sites)
- A plan for the periodic (e.g., annual) evaluation of program effectiveness and plans for updating the program, if necessary.

Note 1: The written hazard communication program must be available upon request to employees, their representatives, Cal/OSHA representatives, and others in accordance with Section 3204(e), "Access to Employee Exposure and Medical Records."

Note 2: Establish an ongoing system to obtain the updated Proposition 65 list of chemicals. For chemicals that are newly added, warning requirements apply 12 months from the effective date of listing.

Hazcom Training Contents

- Requirements of Title 8, California Code of Regulations, Section 5194
- Identify operations in employee work areas where hazardous chemicals are present.
- Methods and observations used to detect the presence or release of a hazardous chemical (appearance, odor)
- Physical and health hazards of the chemicals the employees work with.
- Measures that employees can take to prevent accidents and protect themselves against chemical hazards (e.g. work practices, PPE)
- Location, availability and details of the employers hazard communication plan

(Source: Guide to the California Hazard Communication Regulation, May 2012)

Employee Responsibilities

Employees are required to:

- **Follow the Hazard Communication Program**
- **Identify hazards before starting a new job, task, or procedure**
- **Read and follow the instructions on container labels and Safety Data Sheets (SDS)**
- **Notify supervisor of any hazardous situation**
- **Know how and where to get help**

“Hazard Communication; The standard that gave workers the right to know, now gives them the right to understand.”

- From OSHA announcement of Hazcom 2012 aligned with GHS

<https://www.osha.gov/video/hazcom/index.html>

Globally Harmonized System (GHS)

- Comprehensive approach that harmonizes chemical classification & hazard communication
- Consistent approach to defining & classifying hazards, & communicating information on labels & safety data sheets
- Classification based on hazard properties of chemical

HazCom 2012

- Changes to HazCom bringing US into alignment with Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
- Enhance worker understanding of hazards, especially for low & limited-literacy workers, facilitate safety training, & result in safer handling & use of chemicals
- Provide workers more efficient access to information on SDSs

HazCom: Then & Now

- Old standard allowed chemical manufacturers & importers to convey hazard information on labels & MSDSs in format of their choice
- Hazcom 2012 provides single set of criteria for **classifying** chemicals according to health & physical hazards & specifies hazard communication elements for labeling & Safety Data Sheets
- **Labels**
 - Use pictograms, signal words & hazard statements
 - Same information & language for same hazard
- **MSDS/SDS**
 - Hazard information in consistent & prescribed locations

Hazcom 2012: Labels

- Labeling provisions biggest change GHS brings to Hazcom
- GHS uses consistent pictograms, hazard statements & signal words for specific hazards
- Chemical manufacturers & importers must provide label that includes signal word, pictogram, hazard statement, & precautionary statement for each hazard class & category

Labels

- **Old labeling formats (NFPA, HMIS)**
 - **“0” rating means least hazardous**
 - **“4” rating being most hazardous**

- **Hazcom 2012/GHS is opposite**
 - **“1” classification most hazardous**
 - **“4” being least hazardous**

Hazardous Chemical Labelling

C.4.15 FLAMMABLE GASES (Classified in Accordance with Appendix B.2)

Pictogram
Flame



Hazard category	Signal word	Hazard statement
1	Danger	Extremely flammable gas

Precautionary statements			
Prevention	Response	Storage	Disposal
<p>Keep away from heat/sparks/open flames/hot surfaces. -No smoking. Chemical manufacturer, importer, or distributor to specify applicable ignition source(s).</p>	<p>Leaking gas fire: Do not extinguish, unless leak can be stopped safely.</p> <p>Eliminate all ignition sources if safe to do so.</p>	<p>Store in well-ventilated place.</p>	

Hazcom 2012/GHS

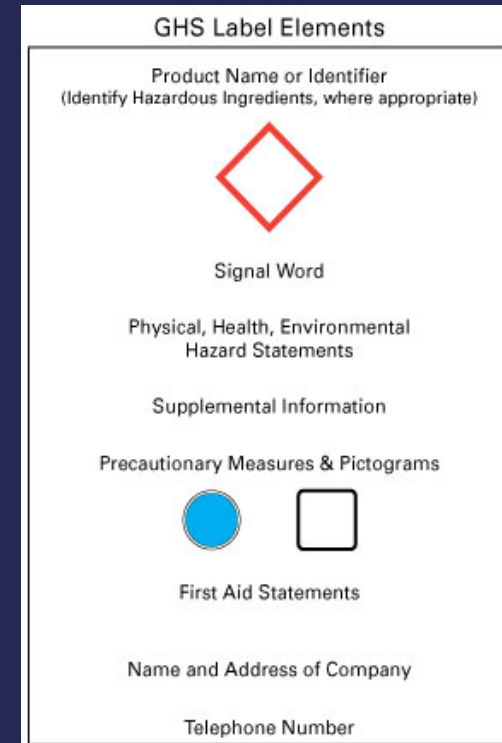
Old Label Elements: Shipping

- **Shipped containers labeled with**
 - **Product ID**
 - **Appropriate hazard warnings**
 - **Name & address of chemical manufacturer, importer, or other responsible party**

- **Performance-oriented specifics left to discretion of chemical manufacturer or importer**

New Label Elements: Shipping

- **Shipped containers labeled with**
 - **Product ID**
 - **Signal word**
 - **Hazard statement(s)**
 - **Pictograms**
 - **Precautionary statements**
 - **Product & supplier identification**
- **Specifies information by hazard class & category**



“Signal Words”

- **Used to indicate relative level of severity of hazard & alert reader to potential hazard on label**
- **“Danger”**
 - **More severe hazard categories (hazard categories 1 & 2)**
- **“Warning”**
 - **Less severe hazard categories (hazard categories 3 & 4)**

Hazard Statements

- **Phrase assigned to hazard class & category that describes nature of hazards of hazardous product, including, where appropriate, degree of hazard, e.g.**
 - **May be fatal if swallowed & enters airways**
 - **Explosive; mass explosion hazard**
 - **Extremely flammable liquid & vapor**
 - **Heating may cause a fire**
 - **Fatal in contact with skin**

Precautionary Statements

- **Phrase (&/or pictogram) that describes recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to hazardous product, or improper storage or handling of hazardous product, e.g.**
 - **Wear protective gloves/protective clothing**
 - **Do not breathe dusts or mists**
 - **Contaminated work clothing must not be allowed out of workplace**

Product Identifier

- **Should be used on label & should match product identifier used on SDS**
- **Where substance or mixture covered by DOT, Proper Shipping Name should also be used on package**
- **Label for substance should include chemical identity of substance**

Workplace Labels

(aka “secondary containers”)

- **In past, was common to use NFPA or HMIS labels for secondary containers**
- **New labeling requirements go further, requiring**
 - **Name of substance**
 - **GHS signal word**
 - **GHS Hazard & Precautionary Statements**
 - **GHS pictograms**

Workplace Labeling

- **Products will carry HazCom 2012 (GHS) label at point where supplied into workplace, & label should be maintained on supplied container in workplace**
- **HazCom 2012 label or label elements should also be used for workplace containers**

HazCom 2012 label Elements

1. Product Identifier
2. Signal word
3. Pictograms
4. Hazard Statements
5. Precautionary Statements
6. Supplier Identification
7. Supplemental Information

EPICHLOROHYDRIN ¹

UN No. 2023
CAS No. 106-89-8

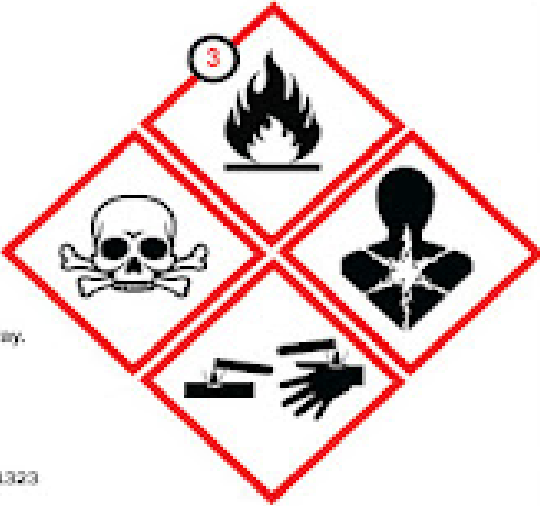
² **DANGER**

⁴ Flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause cancer.

⁵ Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing/eye protection.

Fill Weight: 18.52 lbs. Lot Number: A0303111323
Gross Weight: 20 lbs. Fill Date: 1/15/2018
Expiration Date: 1/15/2018

⁶ JACKSON CHEMICAL COMPANY - City of Industry, Los Angeles, California, USA (800) 444-456-8589



"A" Components for Pressure Pour
SKU: 123, Shaw Group ID#: 345667

Danger


Heating may cause a fire.
Combustible liquid.
May cause damage to organs through prolonged or repeated exposure.
Harms public health and the environment by destroying ozone in the upper atmosphere.
May cause damage to organs through prolonged or repeated exposure by skin contact.
Contains epoxy constituents. May produce an allergic reaction.

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.










Supplemental Label Information
For further information on this product, see Safety Data Sheet.

Contains
Isocyanic acid, polymethylenepolyphenylene ester >>Benzene, 1,1'-methylenebis[4-isocyanato-

Dow Chemical
1881 West Oak Parkway, Marietta, Georgia, 30062-221, United States
Phone: 800365-4740



HazCom 2012 Pictogram

GHS Pictograms and Hazard Classes		
 <ul style="list-style-type: none">• Oxidizers	 <ul style="list-style-type: none">• Flammables• Self Reactives• Pyrophorics• Self-Heating• Emits Flammable Gas• Organic Peroxides	 <ul style="list-style-type: none">• Explosives• Self Reactives• Organic Peroxides
 <ul style="list-style-type: none">• Acute toxicity (severe)	 <ul style="list-style-type: none">• Corrosives	 <ul style="list-style-type: none">• Gases Under Pressure
 <ul style="list-style-type: none">• Carcinogen• Respiratory Sensitizer• Reproductive Toxicity• Target Organ Toxicity• Mutagenicity• Aspiration Toxicity	 <ul style="list-style-type: none">• Environmental Toxicity	 <ul style="list-style-type: none">• Irritant• Dermal Sensitizer• Acute toxicity (harmful)• Narcotic Effects• Respiratory Tract Irritation

SAMPLE LABEL

PRODUCT IDENTIFIER

CODE _____
Product Name _____

SUPPLIER IDENTIFICATION

Company Name _____
Street Address _____
City _____ State _____
Postal Code _____ Country _____
Emergency Phone Number _____

PRECAUTIONARY STATEMENTS

Keep container tightly closed. Store in 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 measure 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.
Dispoae of in accordance with local, regional, national, international regulations as specified.

In Case of Fire: use dry chemical (BC) or Carbon dioxide (CO₂) fire extinguisher to extinguish.

First Aid

If exposed call Poison Center.
If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.

HAZARD PICTOGRAMS



SIGNAL WORD

Danger

HAZARD STATEMENT

**Highly flammable liquid and vapor.
May cause liver and kidney damage.**

SUPPLEMENTAL INFORMATION

Directions for use

Fill weight: _____ Lot Number _____
Gross weight: _____ Fill Date: _____
Expiration Date: _____

References

- **OSHA Brief- Hazard Communication Standard: Labels and Pictograms**
 - **<https://www.osha.gov/Publications/OSHA3636.pdf>**
- **OSHA Quick Card- Hazard Communication Labels**
 - **[https://www.osha.gov/Publications/HazComm Quick Card Labels.html](https://www.osha.gov/Publications/HazComm_Quick_Card_Labels.html)**

Safety Data Sheets (SDS)

Formerly *Material* Safety Data Sheets
(MSDS)

SDS Format: 16 Headings

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 & storage**
8. **Exposure control/personal protection**
9. **Physical & chemical properties**
10. **Stability & reactivity**
11. **Toxicological information**
12. **Ecological information**
13. **Disposal considerations**
14. **Transport information**
15. **Regulatory information**
16. **Other information**

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).

Excerpts from OSHA Brief #3514
<https://www.osha.gov/Publications/OSHA3514.html>

Section 2: Hazard(s) ID

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).
- 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).

Section 3: Composition/Info 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.

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.

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.

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)

Section 7: Handling & 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)

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).

Section 9: Physical & 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.);
- Upper/lower flammability or explosive limits;
- Odor;
- Vapor pressure;
- Odor threshold;
- Vapor density;
- pH;
- Relative density;
- Melting point/freezing point;
- Solubility(ies);
- Initial boiling point and boiling range;
- Flash point;
- Evaporation rate;
- Flammability (solid, gas);
- 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

Section 10: Stability & 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.

(continued on next slide)

Section 10: Stability & Reactivity

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.)

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

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).

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

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).
- UN proper shipping name.
- Transport hazard class(es).
- Packing group number, if applicable, based on the degree of hazard.
- 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 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).

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)

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.

References

OSHA, 29 CFR 1910.1200(g) and Appendix D. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009. These references and other information related to the revised Hazard Communication Standard can be found on OSHA's Hazard Communication Safety and Health Topics page, located at: <http://www.osha.gov/dsg/hazcom/index.html>.

Employer Responsibilities: SDS

- **Employers must ensure that SDSs readily accessible to employees for any & all hazardous chemicals in workplace**
- **May keep SDSs in binder or on computers as long as employees have immediate access to information without leaving their work area when needed & backup available for rapid access to SDS in case of power outage or other emergency**

References

- **OSHA Brief- Hazard Communication Standard: Safety Data Sheets**
 - **<https://www.osha.gov/Publications/OSHA3514.html>**
- **OSHA Quick Card: Hazard Communication Safety Data Sheets**
 - **[https://www.osha.gov/Publications/HazComm Quick Card SafetyData.html](https://www.osha.gov/Publications/HazComm_Quick_Card_SafetyData.html)**

Hazard Communication Program: Step by Step

1. Become familiar with the contents of the Hazard Communication Regulation (Title 8, California Code of Regulations, Section 5194)
2. Designate staff responsible for developing, implementing, and monitoring the hazard communication program.
3. Develop and maintain a current inventory of all hazardous substances to which employees may be exposed.
4. Obtain/Maintain current Safety Data Sheets (SDSs) for all hazardous substances listed on the workplace inventory prepared in Step 3
5. Check original and secondary containers to ensure they are properly labeled. (Include Proposition 65 warning requirements if applicable.)

(Source: Guide to the California Hazard Communication Regulation, May 2012)

Hazard Communication Program: Step by Step

6. **Train employees** on the Hazard Communication Regulation and on the hazardous substances in your workplace, including:
 - What SDSs are and how to interpret them
 - Proper labeling procedures
 - Employee protective measures
 - Signs and symptoms of excessive exposure

7. Keep your **written hazard communication** program current by ensuring that:
 - New employees are trained.
 - Employees are retrained whenever new hazardous substances are introduced into the workplace

9. Be sure that new chemicals are received with proper labels and SDSs, and secondary containers are also properly labeled.

10. Address any contractor issues. Your employees could be exposed to new chemicals brought onto the site by the contractor's employees, or the contractor's employees could be unfamiliar with the chemicals already on your site.

GHS Compliance Dates

Effective Completion Date	Requirement(s)	Who
12/1/13	Train employees on new label elements & SDS format	Employers
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6/1/16	Update alternative workplace labeling & hazcom program as necessary, & provide additional employee training for newly identified physical or health hazards	Employers
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