

Cal/OSHA Global Harmonization Update

Fall 2013

Proposition 65

Hazard Communication

Global Harmonization

Uniformity of
Safety Data Sheets and Labels

Today's Discussion

How did we get here?

Where are we now?

Where are we going?

What do I have to do?

What is the timeline?

Where do I go for help?

Where are we now?

T8 CCR 5194 Hazard Communication

Written Program

List of Chemicals (Products)

Material Safety Data Sheets MSDSs

More >

How did we get here?

MSDS Sheets

CA MSDS Standard

Right To Know

Director's List

More >

Primary Labels

Secondary Containers and Labels

Employee Training

Labeling process vessels, transfer containers

T8 CCR 3321 Identification of Piping

- Color Coding
- Tags
- Stencils

Resource ALERT!!!

The California Hazard Communication Regulation

<http://www.dir.ca.gov/Title8/5194.html>

Check out the toggle

T8 CCR (Group 16)

- Specific Chemicals
- Special Warning Signs and Labels
- Examples: Asbestos, Lead

The screenshot shows a webpage with the following text:

This information is provided free of charge for the Department of Industrial Relations from its web site at www.dir.ca.gov. These regulations are for the convenience of the user and no representation or warranty is made that the information is current or accurate. Your full disclosure is www.dir.ca.gov/dosh_publications.html

 Subchapter 7. General Industry Safety Orders

Group 16. Control of Hazardous Substances

Article 16A. Hazardous Substances and Processes

[Return to Index](#)

[Print page](#)

16194. Hazard Communication (as of July 6, 2004)

 - For the 16194 regulation adopted on May 6, 2013 - [CRS Act](#)

 - [Go to California Hazard Communication Regulations](#)

 (b) (General)

 (1) Scope and Application.

 (1) This section requires manufacturers or importers to assess the hazards of substances which they produce or import, and all employees to provide information to their employees about the hazardous substances to which they may be exposed; to maintain an hazard communication program, labels and other forms of warning, material safety data sheets, and information and training; to address the section requires distributors to transmit the required information to employees.

 (2) This section applies to any hazardous substance which is known to be present in the work place in such a manner that employees may be exposed under normal conditions of use or in a reasonably foreseeable emergency resulting from work place operations.

 (3) This section applies to substances that primarily provide quality control analysis for manufacturing processes or that produce hazardous substances for commercial purposes, and to all other information except those under the direct operation and regular observation of an individual who has knowledge of the physical hazards, health hazards, and emergency procedures associated with the use of the particular hazardous substances involved, and who conveys this knowledge to employees in terms of safe work practices. Such exempt laboratories must also ensure that labels of incoming containers of hazardous substances are not removed or defaced pursuant to section 13432(A), and must maintain any material safety data sheets that are received with incoming shipments of hazardous substances.

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Guide to the California Hazard Communication Regulation

http://www.dir.ca.gov/dosh/dosh_publications/hazcom.pdf

Where are we going?

Globally Harmonized System (GHS)
A Worldwide System for Hazard Communication

Adopted by UN in 2002

What is the *Globally Harmonized System (GHS)*?

- ▶ International approach to hazard communication.
- ▶ Agreed criteria for **classification** of chemical hazards.
- ▶ **Standardized** approach to **label** elements and safety **data sheets**.

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Why does the US need it?

- ▶ US regulatory agencies are not harmonized.
- ▶ Domestic producers have to classify and label multiple times for the same product.

Table 1: Flammable and(Combustible) Liquid Classification Comparison

Flash Point Closed Cup	<20°F(-7°C)	20°F(-7°C)- 100°F(38°C)	100°F(38°C)- 140°F(60°C)	140°F(60°C)- 150°F(66°C)	150°F(66°C)- 200°F(93°C)
OSHA	Flammable	Flammable	Combustible	Combustible	Combustible
ANSI	Extremely Flammable	Flammable	Flammable (<141°F/60.5°C)	Combustible	Combustible
RCRA (EPA)	Ignitable	Ignitable	Ignitable		
DOT	Flammable	Flammable	Flammable (<141°F/60.5°C)	Combustible	Combustible
CPSC	Extremely Flammable	Flammable	Combustible	Combustible	
NFPA 30	Class I	Class I	Class II	Class III	Class III

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Key Terminology Changes



- “Hazard Determination” becomes “Hazard Classification”
- “Evaluate” becomes “Classify”
- “MSDS” becomes “SDS”

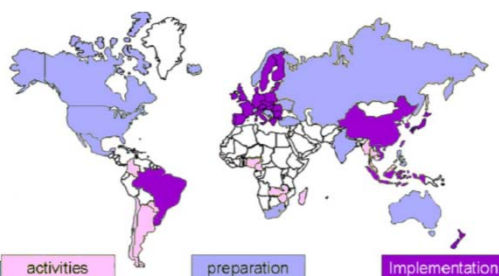
What do I have to do?

- ▶ Integrate the new SDS and labels into your hazard communication program.
- ▶ Update your hazard communication program (minimal – mostly terminology).
- ▶ Retrain all employees by Dec. 1, 2013.



Status

Global GHS Implementation – March 2012












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Required Label Elements

- Product identifier.
- **Signal words** (uniform).
- **Hazard statements** (uniform).
- **Pictograms** (uniform).
- **Precautionary statements** (uniform).
- Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party.

See Handouts

GHS Pictograms

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

The Cal/OSHA and OSHA Global Harmonization Standards will have some differences.

The California Hazard Communication Standards
<http://www.dir.ca.gov/Title8/5194.html>

Check out the toggle
Remember the Appendices

The Cal/OSHA Standards Board
<http://www.dir.ca.gov/oshsb/oshsb.html>

SDS Elements and Format

Section 1, Identification includes product identifier, manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

Section 2, Hazard(s) Identification includes all hazards regarding the chemical; required label elements.

Section 3, Composition/information on ingredients includes information on chemical ingredients; trade secret claims.

Section 4, First-aid measures includes important symptoms/ effects, acute, delayed; required treatment.

Section 5, Fire-fighting measures lists suitable extinguishing techniques, equipment; chemical hazards from fire.

Section 6, Accidental release measures lists emergency procedures; protective equipment; proper methods of containment and cleanup.

Section 7, Handling and storage lists precautions for safe handling and storage, including incompatibilities.

Section 8, Exposure controls/personal protection lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

Section 9, Physical and chemical properties lists the chemical's characteristics.

Section 10, Stability and reactivity lists chemical stability and possibility of hazardous reactions.

Section 11, Toxicological information includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information*

Section 13, Disposal considerations*

Section 14, Transport information*

Section 15, Regulatory information*

Section 16, Other information, includes the date of preparation or last revision.

See handout










QUESTIONS ?

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Federal OSHA
Global Harmonization Resources

https://www.osha.gov/dsg/hazcom/index.html

GHS Pictograms and Hazards

<p style="text-align: center;">Health Hazard</p>  <ul style="list-style-type: none"> ▪ Carcinogen ▪ Mutagenicity ▪ Reproductive Toxicity ▪ Respiratory Sensitizer ▪ Target Organ Toxicity ▪ Aspiration Toxicity 	<p style="text-align: center;">Flame</p>  <ul style="list-style-type: none"> ▪ Flammables ▪ Pyrophorics ▪ Self-Heating ▪ Emits Flammable Gas ▪ Self-Reactives ▪ Organic Peroxides 	<p style="text-align: center;">Exclamation Mark</p>  <ul style="list-style-type: none"> ▪ Irritant (skin and eye) ▪ Skin Sensitizer ▪ Acute Toxicity ▪ Narcotic Effects ▪ Respiratory Tract Irritant ▪ Hazardous to Ozone Layer (Non-Mandatory)
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Sample GHS Label

OSHA has updated the requirements for labeling of hazardous chemicals under its Hazard Communication Standard (HCS). As of June 1, 2015, all labels will be required to have pictograms, a signal word, hazard and precautionary statements, the product identifier, and supplier identification.

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.

Dispose 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: