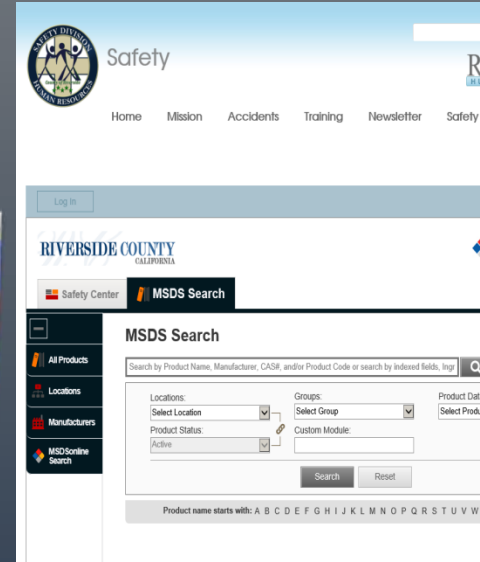


WORKER
"RIGHT TO KNOW"
LAW

Hazard Communication Standard

1910.1200



1910.1200 Who is covered?

The Hazard Communication Standard applies to :

- ▶ Chemical Manufacturers
- ▶ Importers and Distributors
- ▶ Employers
- ▶ And Employees exposed to chemical hazards



What types of chemicals must you know about?



Your
"RIGHT TO KNOW"
LAW



Standard Interpretations

05/15/1997 - Clarification of the definition of a hazardous chemical and the requirements for Safety Data Sheets

OSHA's Hazard Communication Standard applies to

- ▶ A **hazardous chemical**, as defined by the Hazard Communication Standard (HCS), is **any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiate, combustibile dust, pyrophoric gas, or hazard not otherwise classified.**
- ▶ This determination is made by the chemical manufacturer, as described in 29 CFR 1910.1200(d).



Exemptions

(ix) **Any consumer product or hazardous substance**, as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, where the employer can show that it is used in the workplace for the purpose intended by the chemical manufacturer or importer of the product, and the use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended;

(xi) **Ionizing and nonionizing radiation**; and,

(xii) **Biological hazards**.



Required Written Program

- ▶ Employers must develop a written program that covers:
 - List of chemicals present in the workplace
 - Labeling and other forms of warnings
 - Hazards of chemicals in unlabeled pipes
 - Safety Data Sheets
 - Employee Information and Training



Written Program Availability

- The employer must make the written program available, upon request to:
 - Employees and their designated representatives
 - Where work is carried out at more than one location, the program may be kept at the main location.
 - Safety Data Sheets must be available where hazardous materials and chemicals are used.



Employer Information & Training

Employers must provide employees information and training on hazardous chemicals (Safety Data Sheets) in their work area:

- At the time of their initial assignment
- Whenever a new physical or health hazard the employees have not previously been trained about is introduced into their work area.



Employer Information & Training

- Employee training shall include **at least**:
 - The means to detect the presence or release of a hazardous chemical in the work area
 - The physical and health hazards of chemicals in the work area
 - Measures employees can take to protect themselves
 - Details of the employer - specific program

Does this mean ALL employees, or *Only those* who use the chemical ?

GHS Training



Acknowledgement Form

REVERSHIDE COUNTY
Requirements for the Revised Hazard Communication Standard
Employee Safety/Compliance
Online Training

Training Subject: Globally Harmonized System: Labeling and Standardization format for Safety Data Sheets (SDS's, formerly known as Material Safety Data Sheets (MSDS))

Training Materials: Power Point, Sample SDS

Employee Name: _____

Department: _____

I, _____, hereby acknowledge that I have received training as described in the following areas:

_____ Have GHS label elements listed below:

- Product Identifier
- Signalword
- Pictograms
- Hazard Statements
- Precautionary Statements

_____ The GHS SDS standardized 16-section format:

Section 1	Identification	Section 9	Physical and chemical properties
Section 2	Hazard identification	Section 10	Stability and reactivity
Section 3	Composition information on SDS/MSDS	Section 11	Toxicological information
Section 4	First aid measures	Section 12	Ecological information*
Section 5	Fire fighting measures	Section 13	Exposure controls*
Section 6	Accidental release measures	Section 14	Transport information*
Section 7	Handling and storage	Section 15	Regulatory information
Section 8	Exposure controls/personal protection	Section 16	Other information

*Not done other agencies require this information. OSHA will not be enforcing Section 12 through 15SDS 2013

Signature: _____ Date: _____

Hazard Communication Standard Revision

(Globally Harmonized System of Classification and Labeling of Chemicals) = GHS

OSHA requires that all employers provide their employees with training on the Hazard Communications Standard (HazCom). For those of you who need a quick refresher, simply stated, HazCom provides employers and employees extensive information about chemicals and the appropriate protective measures. Although the degree of chemical exposure each employee may experience can vary greatly, relative to the exposure, all employees should receive some measure of HazCom training.

In 2012 HazCom was revised to include the United Nation's Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The original HazCom standard is performance-oriented, allowing chemical manufacturers and importers to convey information on labels and Material Safety Data Sheets (MSDS) in whatever format they choose.

The revised HazCom incorporates the following changes:

- The name of the MSDS has been changed to Safety Data Sheet (SDS);
- The information provided on the SDS has also changed to reflect a universal sixteen section format.

As of December 1, 2013, the Department of Labor required all employers to train employees on the GHS revision.

In order to maintain compliance with this revision, all current employees must view the Globally Harmonized System of Classification and Labeling of Chemicals video training module and sign the Acknowledgement Form. All future county employees must complete the module within 3 months of official hire date. Completed training records must be retained by the respective department. It is important to ensure that when employees begin to see the new labels and SDSs in their workplaces, they are familiar with them, understand how to use them, and access the information effectively.

What are the Risks of Chemical Exposure?

Exposure Risk:

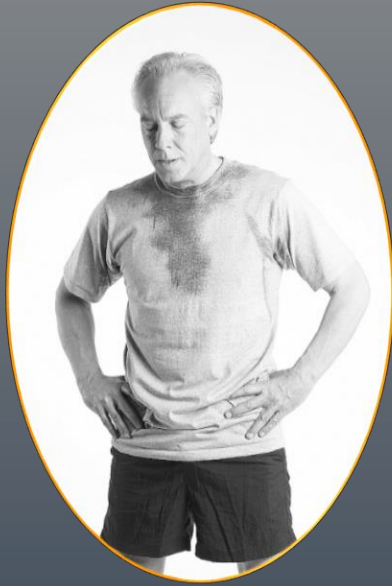
About 32 million U.S. workers potentially exposed to chemical hazards

Profusion of Chemicals:

About 650,000 chemical products exist; hundreds of new ones introduced annually



What are the Hazards?



Health Hazards: May include heart ailments, central nervous system damage, kidney and lung damage, sterility, cancer, burns, and rashes

Physical Hazards: Potential to cause fires, explosions, or other serious accidents.



NIOSH

POCKET GUIDE TO

**CHEMICAL
HAZARDS**

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

OCCUPATIONAL DISEASES



CAUTION

BENZENE

Cancer Hazard



HAZARD DEFINITIONS

▶ Chemical Exposure Severity & Duration

- “Acute” effects usually occur rapidly as a result of short-term exposures, and are of short duration



- “Chronic” effects generally occur as a result of long-term exposure, and are of long duration



HAZARD DEFINITIONS

▶ Health Hazards

The chemical has the potential to cause harm to the body upon exposure

- Carcinogens
- Toxins



Target Organ Effects

- ▶ Skin disease
- ▶ Hepatotoxins: liver damage
- ▶ Nephrotoxins: kidney damage
- ▶ Neurotoxins: nervous system effects
- ▶ Agents which act on the blood or hematopoietic system: deprive body tissues of oxygen
- ▶ Agents which damage the lungs
- ▶ Reproductive toxins, including teratogens (damage fetuses) and mutagens (damage DNA)

<https://www.youtube.com/watch?v=4hv-2zZ599s>

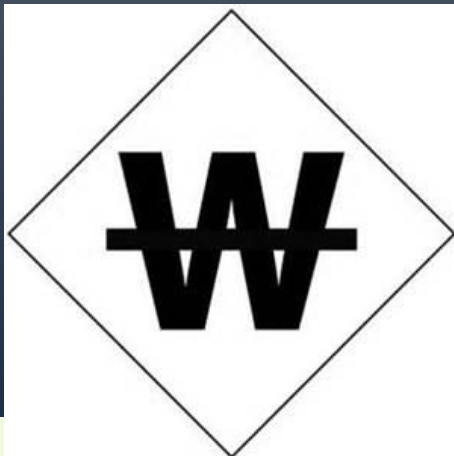


HAZARD DEFINITIONS

► Physical Hazards

The chemical has the potential to cause physical or environmental damage

- Corrosives
- Flammables
- Explosives
- Water Reactives



Chemical Labeling

Labels and other forms of warning are key measures for informing employees of hazardous substances used in a work area. All chemicals must have a chemical label.

Sulfuric Acid

Colorless to dark-brown, oil, odorless liquid. Corrosive, causes severe burns to eyes/skin/respiratory tract. May cause blindness. Chronic: tooth erosion, GI disturbances, and dermatitis. Reaction with water produces excessive heat.



CAS No. 7664-93-9

The image shows a white rectangular label for Sulfuric Acid. On the right side of the label is a diamond-shaped hazard pictogram with a red border. The diamond is divided into four quadrants: top (red) with a black '0', left (blue) with a black '3', right (yellow) with a black '2', and bottom (white) with a black 'W'. To the left of the diamond is a block of text describing the chemical's properties and hazards. Below the diamond is the CAS number.



Labeling Exemptions

- (iv) Any consumer product as defined in the Consumer Product Safety Act where the employer can show that:
 - It is used in the workplace for the purpose intended.
 - Exposure within the range that could reasonably be experienced by consumers when used for intended purpose.



Consumer Product Safety Act
<http://www.cpsc.gov/index.html>

Container Labeling for Portable Containers



Container Labeling for Portable Containers

CHEMICAL NAME

The scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name that will clearly identify the chemical for the purpose of conducting a hazard classification.

GHS 1.4.10.5.2 (d) (29 CFR 1910.1200(c))

PICTOGRAMS

A composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under HCS and nine pictograms are designated under GHS for application to a hazard category.

GHS 1.4.10.4 (29 CFR 1910.1200(c))

SUPPLIER IDENTIFICATION

The name, address, and telephone number of the manufacturer, importer, or other responsible party.

GHS 1.4.10.5.2 (e) (29 CFR 1910.1200(f) (1) (vi))

PRODUCT IDENTIFIER

The name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used shall permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label and the SDS.

GHS 1.4.10.5.2 (d)

(29 CFR 1910.1200(c))

SIGNAL WORD

A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are "danger" and "warning". "Danger" is used for more severe hazards, while "warning" is used for the less severe.

GHS 1.4.10.5.2 (a) (29 CFR 1910.1200(c))

HAZARD STATEMENT

A statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

Example: Fatal if swallowed.

GHS 1.4.10.5.2 (b) (29 CFR 1910.1200(c))

PRECAUTIONARY STATEMENT

A phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling.

Example: Do not eat, drink, or smoke when using this product.

GHS 1.4.10.5.2 (c) (29 CFR 1910.1200(c))

PAINT (METHYL FLAMMALINE, LEAD CHROMIUM) UN1263
CAS# XXXX-XX-X

DANGER

Causes damage to the liver and kidneys through prolonged or repeated exposure to the skin.
Highly flammable liquid and vapour.

Wash hands thoroughly after use and before eating.
Keep away from food and drink.
Keep away from heat and ignition sources.

FIRST AID

Call emergency medical care.
Wash affected area of body thoroughly with soap and fresh water.

GHIS Paint Company, Chicago, IL, USA Telephone 999 999 9999

GHISTRNWC1 © LABELMASTER® (800) 621-5808 www.labelmaster.com

FIRST AID STATEMENT

There are four types of precautionary statements presented, "prevention," "response," "storage," and "disposal."

GHS 1.4.10.5.2 (c)

(29 CFR Appendix C to 1910.1200-C.2.4.1)

Container Labeling Exemption for Portable Containers

- The employer is not required to label portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the immediate use by the employee who performs the transfer. **However, the best practice is to label ALL chemical containers.**
- **Should these containers be labeled?**



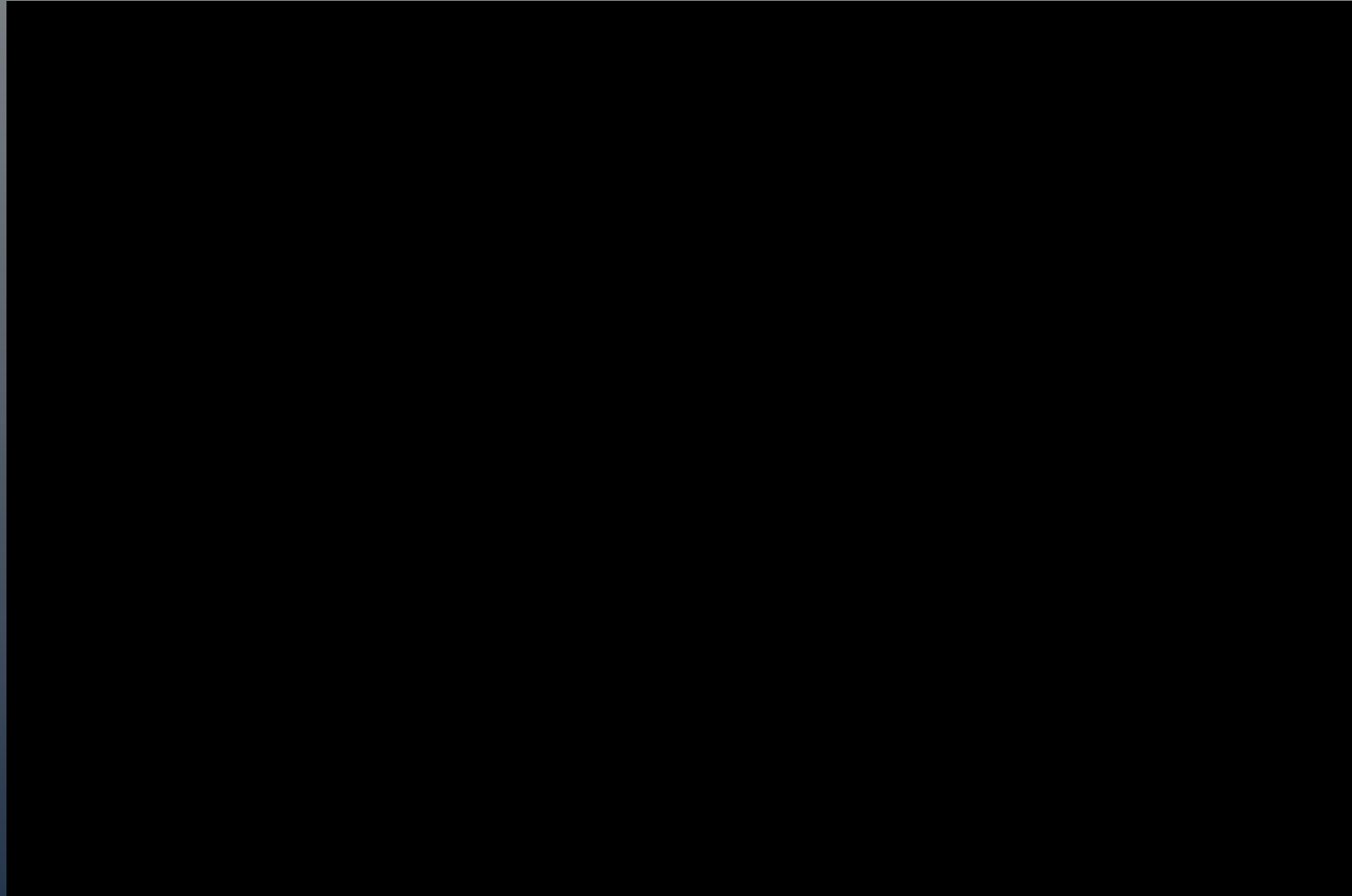
Should this container be labeled?





The
GHS
Globally Harmonized System
of Classification and Labeling of Chemicals

OSHA's Hazard Communication Standard and GHS Video



Categorization of GHS Hazards

- Explosives
- Flammable gases
- Aerosols
- Oxidizing gases
- Gases under pressure
- Flammable liquids
- Flammable solids
- Self-reactive
- Pyrophoric liquids
- Pyrophoric solids
- Self-heating substances
- Oxidizing liquids
- Oxidizing solids
- Organic peroxides
- Corrosive to metals
- Substances and mixtures which, in contact with water, emit flammable gases

New Labeling System

SAMPLE LABEL



<p>CODE _____ Product Name _____</p>	}	<p>Product Identifier</p>	
<p>Company Name _____ Street Address _____ City _____ State _____ Postal Code _____ Country _____ Emergency Phone Number _____</p>	}	<p>Supplier Identification</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.

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 (or hair): Take off immediately any contaminated clothing. Rinse skin with water.

Hazard Pictograms



Signal Word
Danger

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

}

Hazard Statements

Precautionary Statements

Supplemental Information

Directions for Use










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

OSHA 3492-02 2012

Distributors deadline December 1, 2015
Employers deadline June 1, 2016

HCS Pictograms and Hazards

New Labeling System Uses Signal Words

<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 (harmful) • 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)

Safety Data Sheets

- ▶ Consists of 16 sections in standard format
- ▶ Employers must ensure that SDSs are readily accessible to employees.
- ▶ Deadline June 1, 2015

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

WD-40 Aerosol

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture:

Corrosion protection
Lubricant

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

WD40 Company Limited UK, PO Box 440, Kiln Farm, Milton Keynes, MK11 3LF
Telephone 01908 555400, Fax 01908 266900
info@wd40.co.uk

E-mail address of the competent person: info@chemical-check.de, k.schnurbusch@chemical-check.de

1.4 Emergency telephone

Advisory office in case of poisoning:

Telephone number of the company in case of emergencies:

Tel.: +49 (0) 700 / 24 112 112 (WDC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) 1272/2008 (CLP)

Not determined

2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments).

F+, Extremely flammable
Xn, Harmful, R65
R66
R67

2.2 Label elements

2.2.1 Labeling according to Regulation (EC) 1272/2008 (CLP)

Not determined

2.2.2 Labeling according to Directives 67/548/EEC and 1999/45/EC (including amendments).

Symbols: F+

Indications of danger:

Extremely flammable

R-phrases:

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

S-phrases:

23 Do not breathe vapour/spray.

24 Avoid contact with skin.



Safety Data Sheets

**HAZCOM: SAFETY
DATA
SHEETS
TOP 10**



Questions for Review

How does the hazard communication standard benefit employees?

- Employees should know the chemical health hazards and physical hazards of the hazardous chemical products and materials they handle and use in their jobs. It is your right to know!
- What are some of the hazardous chemicals and materials used in your job?
- What about flammables, caustics, solvents, degreasers and lubricants?
- Do the safety data sheets have to be available on the job site where the chemicals are used for reference in the event of an exposure, accidental spill and response?
- Should you read the SDS for safe handling and storage requirements?
- Are you wearing the recommended PPE to protect your health?

Compliance with the Hazard Communication Standard

Reference: SSOM Document 6001

Contents/Sections of an Hazard Communication Binder:

1. A copy of SSOM Document 6001 or a copy of the Facility Written Hazard Communication Program.
2. A copy Emergency Exposure Procedures (SOP Form 6001-4), a completed Notice of Employee Rights (SOP Form 6001-2)
3. A list of Hazardous Substances used at the workplace. (Conduct a chemical inventory of products supplied by the Department and used by employees)
4. Safety Data Sheets for each chemical listed.
4. Safety Data Sheets of products no longer used in a 'Dead file' section
5. Employee training records, SSOM document 6001, page 22





Questions?

