
Hazard Communication

29 CFR 1910.1200

Presented by:

Objectives

29 CFR 1910.1200

- After this course, students will recognize and understand:
 - Purpose and scope of hazard communication in the workplace
 - Role management and employee's responsibilities in complying with this standard
 - General requirements regarding chemical hazard classifications
 - Requirements for an effective written hazard communication program

Appendixes

- **Appendix A**, Health Hazard Criteria (Mandatory)
- **Appendix B**, Physical Criteria (Mandatory)
- **Appendix C**, Allocation of Label Elements (Mandatory)
- **Appendix D**, Safety Data Sheets (Mandatory)
- **Appendix E**, Definition of “Trade Secret” (Mandatory)
- **Appendix F**, Guidance for Hazard Classifications Re: Carcinogenicity (Non-Mandatory)

Purpose

1910.1200(a)

- Ensure hazards of all chemicals produced or imported are ***classified*** and that information concerning the classified hazards is transmitted to employers and employees.

Classified Chemical Hazards

Scope and Application

1910.1200(b)(1)

- Requires chemical manufacturers or importers to ***classify*** the hazards of chemicals that they produce or import.
- Requires distributors to ***transmit*** the required information to employers.

Transmit Information

Scope and Application

1910.1200(b)(1)

- Requires employers to provide ***information*** to their employees about the hazardous chemicals to which they are exposed by the following means:
 - Hazard communication (HazCom) program
 - Labels and other forms of warning
 - Safety data sheets (SDS)
 - Information and training

Scope and Application

1910.1200(b)(2)

- Applies to chemicals known to be present in the workplace.
 - Employees that may have a potential for exposure.
 - Under normal conditions
- or**
- Foreseeable emergency



Scope and Application

1910.1200(b)(3)

- **Application for laboratories only**
 - Labels are not to be removed or defaced
 - Maintain SDS for each chemical
 - SDS must be readily available
 - Provide information and training
- A laboratory that ships chemicals is considered to be a distributor or manufacturer:
 - Must ensure that containers are appropriately labeled prior to shipment, *and*
 - SDS is provided to other distributor(s) or employer(s)

Scope and Application

1910.1200(b)(4)

- Application for work operations where chemicals are handled only in **sealed** containers:
 - Labels not to be removed or defaced
 - Maintain SDS for each chemical
 - SDS must be readily accessible
 - Provide information and training
 - » Except location and availability of HazCom program
 - » Trained to protect themselves in the event of a spill or leak



Scope and Application

1910.1200(b)(5)

● Exemptions for labeling

- **Pesticides** (Federal insecticide, fungicide, and rodenticide Act 7 U.S.C. 136)
- **Chemical Substance or mixture** (Toxic Substances Control Act 15 U.S.C. 2601 et seq.)
- **Food, food additive, color additive** (FDA 21 U.S.C. 301)
- **Cosmetic, medical or vet device** (FDA 21 U.S.C. 301)
- **Distilled spirits** (Federal Alcohol Administration Act 21 U.S.C. 201)
- **Consumer products** (Consumer Product Safety Act 15 U.S.C. 2501)
- **Agricultural or vegetable seed** (Federal Seed Act 7 U.S.C. 1551)

Scope and Application

1910.1200(b)(6)

- Standard ***does not*** apply to:
 - Hazardous wastes and substances
 - Tobacco or tobacco products
 - Wood or wood products
 - Articles as defined in the standard
 - Food or alcoholic beverages
 - Drugs



Scope and Application

1910.1200(b)(6)


- Standard ***does not*** apply to:
 - Cosmetics for retail sale
 - Consumer products
 - Nuisance particulates
 - Ionizing and nonionizing radiation
 - Biological hazards



Key Elements of HazCom

1910.1200

- Hazard classification
- Written program
- Labeling
- SDS
- Employee training

EXTREMELY FLAMMABLE LIQUIDS (Classified in Accordance with Appendix B.6)				
Hazard category	Signal word	Hazard statement	Pictogram Flame	
1	Danger	Extremely flammable liquid and vapor		
2	Danger	Highly flammable liquid and vapor		
3	Warning	Flammable liquid and vapor		
Precautionary statements				
Prevention		Response	Storage	Disposal
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Chemical manufacturer, importer, or distributor to specify applicable ignition source(s).		If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.	Store in a well-ventilated place. Keep cool.	Dispose of contents/container to... ... in accordance with local/regional/national/international regulations (to be specified).
Keep container tightly closed.		In case of fire: Use ... to extinguish. ... Chemical manufacturer, importer, or distributor to specify appropriate media. - <i>if water increases risk.</i>		
Ground/Bond container and receiving equipment - <i>if electrostatically sensitive material is for reworking.</i> - <i>if product is volatile so as to generate hazardous atmosphere.</i>				
Use explosion-proof electrical/ventilating/lighting/...equipment. ... Chemical manufacturer, importer, or distributor to specify other equipment.				
Use only non-sparking tools.				
Take precautionary measures against static discharge.				
Wear protective gloves/eye protection/face protection Chemical manufacturer, importer, or distributor to specify type of equipment.				

NCDOL Photo Library

● “Hazardous chemical”

– Any chemical that is classified as a:

- » Physical hazard
- » Health hazard
- » Simple asphyxiant
- » Combustible dust
- » Pyrophoric gas
- » Hazard not otherwise classified



Definitions

1910.1200(c)

● “Physical hazard”

– A chemical classified as posing one of the following hazardous effects:

- » Explosive
- » Oxidizer (liquid, solid or gas)
- » Self-reactive
- » Pyrophoric (liquid or solid)
- » Self-heating
- » Organic peroxide
- » Corrosive to metal
- » Gas under pressure
- » Emits flammable gas in contact with water
- » Flammable (gases, aerosols, liquids or solids)



What's the hazard?

Definitions

1910.1200(c)

- **“Health hazard”**

- A chemical that 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)
- » Aspiration hazard



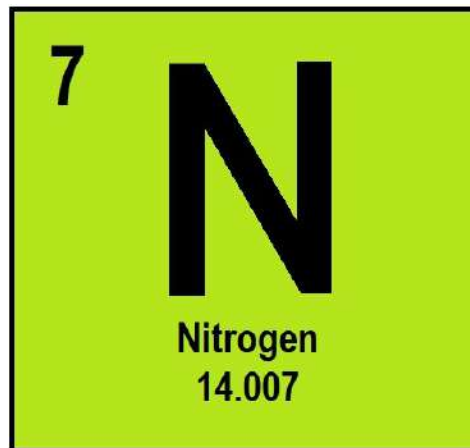
- **“Pyrophoric gas”**

- A chemical in a gaseous state that will ignite spontaneously in air at a temperature of 130 degrees F (54.4 degrees C) or below.

Arsine Gas (AsH_3)

- **“Simple asphyxiant”**

- A substance or mixture that displaces oxygen in the ambient atmosphere and can cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.



NCDOL Photo Library

- **“Hazard not otherwise classified (HNOC)”**
 - An adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes addressed in this section (standard).
 - The effect either:
 - » Falls below the cut-off value/concentration limit of this hazard class, *or*
 - » Is under a Globally Harmonized System (GHS) hazard category not adopted by OSHA (e.g., acute toxicity Category 5)

Hazard Classification

1910.1200(d)

- Each type of hazard covered is considered a “**hazard class**”.
 - *Examples: acute toxicity, carcinogenicity*
- Most hazard classes are also subdivided into “**hazard categories**” to reflect the degree of severity of the effect.
- This is the concept of “**classification**”—rather than just determining that there is a hazardous effect (e.g., carcinogenicity), there is also a finding of how severe that effect might be (e.g., category 1 or 2).

Appendix A - Health Hazard Criteria

Health Hazard Class	Health Hazard Category			
Acute Toxicity	1	2	3	4
Skin Corrosion/Irritation	1A	1B	1C	2
Serious Eye Damage/ Eye Irritation	1	2A	2B	
Respiratory or Skin Sensitization	1			
Germ Cell Mutagenicity	1A	1B	2	
Carcinogenicity	1A	1B	2	
Reproductive Toxicity	1A	1B	2	Lactation
STOT – Single Exposure	1	2	3	
STOT – Repeated Exposure	1	2		
Aspiration	1			
<i>Simple Asphyxiants</i>	Single Category			

STOT – Specific Target Organ Toxicity

Appendix B – Physical Criteria

Physical Hazard Class	Physical Hazard Category						
Explosives	Unstable Explosives	Div 1.1	Div 1.2	Div 1.3	Div 1.4	Div 1.5	Div 1.6
Flammable Gases	1	2					
Flammable Aerosols	1	2					
Oxidizing Gases	1						
Gases under Pressure Compressed Gases Liquefied Gases Refrigerated Liquefied Gases Dissolved Gases	1						
Flammable Liquids	1	2	3	4			
Self-Reactive Chemicals	Type A	Type B	Type C	Type D	Type E	Type F	Type G
Pyrophoric Liquids	1						
Pyrophoric Solid	1						
<i>Pyrophoric Gases</i>	Single category						
Self-heating Chemicals	1	2					
Chemicals, which in contact with water, emit flammable gases	1	2	3				
Oxidizing Liquids	1	2	3				
Oxidizing Solids	1	2	3				
Organic Peroxides	Type A	Type B	Type C	Type D	Type E	Type F	Type G
Corrosive to Metals	1						
<i>Combustible Dusts</i>	Single Category						

Written Program

1910.1200(e)(1) & (4)

- Employer must have a **written hazard communication program**.
- It must be available upon request to:
 - Employees and/or their designated representative
 - OSHA

_____ (Company Name)

I. This program will describe how _____ intends to protect the safety and health of our employees who are exposed to hazardous chemicals in the workplace, and to comply with the provisions of 29 C.F.R. 1910.1200.

II. _____ has been assigned the role of Hazard Communication System Manager and is responsible for maintaining all related activities to ensure compliance with both the intent and specifics of the program.

Each employee will be held responsible for strict adherence to these policies, and will notify the Safety Department of any hazardous chemicals.

Each employee will carefully follow established work practices and promptly report observed or potential problems to supervisors.

Those in an job _____ as stated or receive as to justify the role of employee as responsible to a hazardous chemical. All when in doubt, Proceed only a job only after being satisfied that it is safe for you to do so.

III. A list of all hazardous chemicals for each workplace has been made available in readily accessible, upon request, to any employees working on my shift. It is located at _____.

IV. A Material Safety Data Sheet (MSDS) for each hazardous chemical on the list referenced above is in file # _____.

The MSDS are accessible during each work shift for any employee to review. If you have further questions about the MSDS program, contact your supervisor.

V. _____ is responsible to ensure that the list of hazardous chemicals is kept current and that a current MSDS for each hazardous chemical used is on hand. A chemical that is not checked on the current list will not be ordered without prior consultation with _____.

VI. All containers of hazardous chemicals in each workplace will be conspicuously labeled with the identity of the chemical (name as on the applicable MSDS), and the appropriate hazard warnings. If the chemical is a liquid, or suspended powder, except compressed gas, or if it is known to affect a specific organ of the body, this information will also be placed on the container label. The person having supervisory responsibility for the storage or use of each hazardous chemical will ensure that such labels are not defaced and that they remain legible in all times.

_____ will ensure that an adequate supply of labels is kept on hand and made available to the responsible supervisor.

VII. _____ is responsible for anticipating, as much as possible, _____.

NCDOL Photo Library

Written Program

1910.1200(e)

- Must contain how the following will be met:
 - Labels and other forms of warning
 - Safety data sheets
 - Information and training
 - List of chemicals

(Company Name)

I. This program will describe how _____ intends to protect the safety and health of our employees who are exposed to hazardous chemicals in the workplace, and to comply with the provisions of 29 CFR 1910.1200.

II. _____ has been assigned the title of Hazard Communication Program Monitor and is responsible for monitoring all related activities to ensure compliance with both the intent and specifics of this program.

Each supervisor will be held responsible for strict adherence to these policies and will closely monitor all activities involving hazardous chemicals.

Each employee will carefully follow established work practices and promptly report observed or potential problems to supervision.

There is no job _____ to vital or urgent as to justify the risk of employee overexposure to a hazardous chemical. Ask when in doubt. Proceed with a job only after being satisfied that it is safe for you to do so.

III. A list of all hazardous chemicals for each workplace has been made and is readily available, upon request, to any employee, working on any shift. It is located at _____.

IV. A Material Safety Data Sheet (MSDS) for each hazardous chemical on the list referenced above is on file at _____.

The MSDS are accessible during each work shift for any employee to review. If you have further questions about the MSDS program, contact your supervisor.

V. _____ is responsible to ensure that the list of hazardous chemicals is kept current and that a current MSDS for each hazardous chemical used is on hand. A chemical that is not shown on the current list will not be ordered without prior coordination with _____.

VI. All containers of hazardous chemicals in each workplace will be conspicuously labeled with the identity of the chemical (same as on the applicable MSDS), and the appropriate hazard warnings. If the chemical is a known or suspected cancer causing agent (carcinogen), or if it is known to affect a specific organ of the body, this information will also be placed on the container label. The person having supervisory responsibility for the storage or use of each hazardous chemical will ensure that such labels are not defaced and that they remain legible at all times.

_____ will ensure that an adequate supply of labels is kept on hand and made available to the responsible supervisors.

VII. _____ is responsible for anticipating, as much as possible,

NCDOL Photo Library

Written Program

1910.1200(e)(1)(ii)

- Must also contain:
 - Methods used to inform employees of the hazards associated with ***non-routine tasks***.
 - » ***Example: Cleaning a reactor vessel***
 - Hazards associated with chemicals contained in ***unlabeled pipes*** in the workplace.

Written Program

1910.1200(e)(2)

- Multi-employer workplaces
 - Methods used to inform other employer(s):
 - » SDS access
 - » Precautionary measures during normal operating conditions and in foreseeable emergencies
 - » Labeling system (in-house or workplace labeling)

Written Program

1910.1200(e)(5)

- When employees travel between workplaces during a work shift (their work is carried out at more than one geographical location).
 - HazCom program may be kept at a primary workplace facility.

Supervisor Name

I. This program will describe how _____ intends to protect the safety and health of our employees who are exposed to hazardous chemicals in the workplace, and to comply with the provisions of 29 CFR 1910.1200.

II. _____ has been assigned the role of Hazard Communication Program Manager and is responsible for administering all related activities to ensure compliance with both the letter and spirit of this program.

Each supervisor will be held responsible for strict adherence to these policies and will identify potential all activities involving hazardous chemicals.

Each employee will carefully follow established work practices and promptly report observed or potential problems to supervisors.

There is no job _____ or visit or report to protect the risk of employee exposure to hazardous chemicals. All work is done. Proceed with a job only after being instructed that it is safe for you to do so.

III. A list of all hazardous chemicals for each workplace has been made and is readily available upon request to any employee, working on any shift. It is located at _____.

IV. A Material Safety Data Sheet (MSDS) for each hazardous chemical on the list is maintained there at all times.

The MSDS are accessible during each work shift for any employee to review. If you have further questions about the MSDS program, contact your supervisor.

V. _____ is responsible to ensure that the list of hazardous chemicals is kept current and that it complies with the requirements contained hereon in detail. A chemical that is not shown on the current list will not be received unless prior consultation with _____.

VI. All containers of hazardous chemicals in each workplace will be conspicuously labeled with the identity of the chemical (name as on the appropriate MSDS) and the appropriate hazard category; the chemical is known as suspended (except where appropriate), or if it is known to affect a specific organ of the body, the information will also be shown on the container label. The person having responsibility for the storage or use of each hazardous chemical will ensure that each label is not obscured and that they remain legible at all times.

_____ will ensure that an adequate supply of labels is kept on hand and made available to the responsible supervisors.

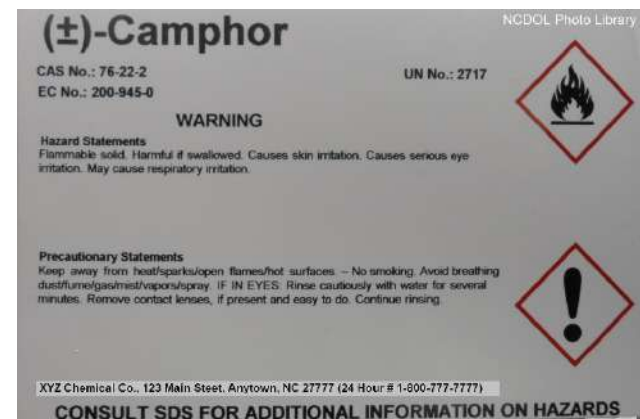
VII. _____ is responsible for investigating, as much as possible,

MSDCR Photo Library

Labeling

1910.1200(c)

- “**Label**” - An appropriate group of **written, printed or graphic** information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.



Labeling

1910.1200(f)

- Must be in ***English*** and ***prominently displayed***:
 - Product identifier
 - Signal word
 - Hazard statements
 - Pictogram(s)
 - Precautionary statement(s)
 - Name, address and telephone number of manufacturer/importer/responsible party

Harmonized Information

Danger vs. Warning

- **“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.
 - **“Danger”** is used for the more severe hazards.
 - **“Warning”** is used for the less severe.

Hazard Statements

- **“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:** *Harmful if inhaled (for Category 4 Acute Toxicity - Inhalation)*










Pictogram				
Signal word	Danger	Danger	Danger	Warning
Hazard statement	Fatal if inhaled	Fatal if inhaled	Toxic if inhaled	Harmful if inhaled

Pictograms

- **“Pictogram”** means 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 this standard for application to a hazard category.
 - » *GHS Environmental pictogram is not used by OSHA*



Hazard Communication – Pictograms and Hazards

<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)

Precautionary Statements

- **“Precautionary statement”** means 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 for Explosives, Division 1.1, 1.2 and 1.3***
 - » Keep away from heat/sparks/open flames/hot surfaces. No smoking
 - » Keep wetted with...
 - » Ground/bond container and receiving equipment
 - » Do not subject to grinding/shock/.../friction
 - » Wear face protection

Additional Requirements

- Harmonized information is to be provided together on the label.
 - Signal words, pictograms and hazard statements
- All information is to be ***prominently displayed*** and in ***English*** (although other languages may also be provided).
- Requirement that information not conflict with transport labels remains the same.

Label Example

NCDOL Photo Library

(±)-Camphor

CAS No.: 76-22-2 UN No.: 2717
EC No.: 200-945-0



WARNING

Hazard Statements
Flammable solid. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Precautionary Statements
Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

XYZ Chemical Co., 123 Main Street, Anytown, NC 27777 (24 Hour # 1-800-777-7777)

CONSULT SDS FOR ADDITIONAL INFORMATION ON HAZARDS



- **Solid materials**

- Solid metal, wood or plastic items not exempted as articles due to downstream use.
 - » Label must be transmitted to customer with initial shipment.
 - » Does not apply to any chemicals used with or present with materials to which employees may be exposed by handling.
 - **Examples:** *cutting fluids, pesticides*

Labeling

1910.1200(f)(6)

● Workplace labeling

- Each hazardous chemical container must be ***labeled, tagged or marked*** with either:
 - » Information required for labels on shipped containers

Or

- » Product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals.



NCDOL Photo Library

(In conjunction with the other information immediately available to employees under the hazard communication program)

Labeling

1910.1200(f)(8)

● Labeling exemption

- Portable containers that are intended for ***immediate use*** by the employee who performs the transfer of hazardous chemical from a labeled container.
- **Immediate use**
 - » Under the control of, ***and***
 - » Used only by the employee, ***and***
 - » Within the work shift of transfer



*Unlabeled and
Uncontrolled Portable
Container*

Safety Data Sheets

1910.1200(g)

● “Safety Data Sheet”

- **Written or printed** material concerning a hazardous chemical that is prepared in accordance with **paragraph (g)**—*Safety Data Sheets*.

Safety First Chemical Company
SAFETY DATA SHEET

Creation Date: 12 Nov 2013 Revision Date: 27 Oct 2014 Revision Number: 1

1. - Identification
Product Name: Sulfuric Acid (Certified ACS Plus)
CAS No.: ABCD123456

Systematic: Hydrogen sulfate (100% lower ac) (10 of 100)
Recommended Use: Laboratory chemical
Uses advised against: No information available
Details of the number of the safety data sheet:

Company: Safety First Chemical Co.
100 Main Street
Anytown, NC 27777
1-800-555-1234
Emergency Telephone Number: CHEMTREC: Inside the USA: 855-426-4262
Outside the USA: 919-759-527-0889

2. - Hazard(s) Identification
Hazard(s) identified:
The product is considered hazardous by the 2012 GHS Hazard Communication Standard (2012 1615 L200)

Corrosive to metals	Category 1
Skin Corrosion/Irritation	Category 1 A
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ toxicity - single exposure	Category 2

Label Elements:
Signal Word: Danger
Hazard Pictograms:
May be corrosive to metals
Causes severe skin burns and eye damage
May cause respiratory irritation

Page: 1 of 1 NCDOL Photo Library

Safety Data Sheets

1910.1200(g)

- Chemical manufacturers and importers must obtain or develop an SDS.
- Employers must have an SDS in the workplace for each chemical they use.
- Must be in English.

Safety First Chemical Company
SAFETY DATA SHEET

Creation Date: 12-Nov-2010 Revision Date: 27-Oct-2014 Revision Number: 1

1. - Identification
Product Name: Sulfuric Acid (Certified ACS Plus)
Cat No.: ABCD123456

Supplier: Multiple suppliers. Refer to sheet 001-001 of data
Recommended Use: Laboratory purposes.
Store related segment: No information available
Details of the supplier of this safety data sheet:

Company: Safety First Chemical Co. Emergency Telephone Number: 1-800-555-5678
100 Main Street Charlotte, NC 27777 CHEMTRICAL, Outside the USA: 901-724-5211/882
1-800-555-5678

2. - Hazard(s) Identification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Corrosive to metals	Category 1
Skin Corrosion/Irritation	Category 1, A
Respiratory System Irritation (Dusts and fumes)	Category 1
Respiratory System Irritation (Gases and vapors)	Category 1
Target Organ - Respiratory system	Category 1

Label Elements:
Signal Word: Danger
Hazard Statements:
May be corrosive to metals.
Causes severe skin burns and eye damage.
May cause respiratory irritation.

Page: 1 of 1 NCDOL Photo Library

Safety Data Sheets

1910.1200(g)

- 16-section safety data sheet
- Several sections are not mandatory since they address information outside OSHA's jurisdiction (Sections 12-15)
- ***Appendix D—Safety Data Sheets (Mandatory)*** provides the details of what is to be included in each section
- No subheading in Sections 1-11 and 16 can be left blank

Safety Data Sheet Format

1910.1200(g)

1. Identification of the substance or mixture and of the supplier
2. Hazard identification
3. Composition/information on ingredients
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. *Ecological information (non-mandatory)*
13. *Disposal considerations (non-mandatory)*
14. *Transport information (non-mandatory)*
15. *Regulatory information (non-mandatory)*
16. Other information, including date of preparation or last revision

Safety First Chemical Company
SAFETY DATA SHEET

Creation Date: 12-Nov-2019 Revision Date: 27-Oct-2014 Revision Number: 1

1. - Identification
Product Name: Sulfuric Acid (Certified ACS Plus)
Cat No.: ABCD123456

Synonyms: Hydrogen Sulfide: Vinyl bromide, Oil of vitriol
Recommended Use: Laboratory chemicals
Uses advised against: No information available
Details of the supplier of the safety data sheet:

Company: Safety First Chemical Co.
100 Main Street
Anytown, NC 27777
1-800-855-8888

Emergency Telephone Number:
CHEMTREC®: Inside the USA: 800-424-9300
CHEMTREC®: Outside the USA: 901-759-5227-3367

2. - Hazard(s) Identification
Classification:
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Corrosive to metals	Category 1
Skin Corrosion/Irritation	Category 1 A
Severe Eye Damage/Eye Irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Target Organ - Respiratory system	

Signal Words:
Danger

Hazard Statements:
May be corrosive to metals.
Causes severe skin burns and eye damage.
May cause respiratory irritation.

Page: 1 / 7 NCDOL Photo Library

Safety Data Sheets

1910.1200(g)

- Chemical manufacturers or importers must ensure that distributors and employers are provided an appropriate SDS.
 - With their *initial shipment, and*
 - With the first shipment after an SDS is updated.



Safety Data Sheets

1910.1200(g)

- SDS access for employees
 - Readily accessible
 - During work shift
- Electronic and other alternatives are acceptable
 - No barriers to immediate employee access.
- When employees travel between workplaces during a work shift
 - May be kept at primary workplace.

Employee Exposure Records

1910.1200(g)(11)

- References 1910.1020—Access to Employee Exposure and Medical Records
 - An “employee exposure record” must include Safety Data Sheets (SDS)*.
 - In the absence of an SDS, a chemical inventory
 - Must be held and maintained at least **30 years**.
 - Employee access to records.

** The 3/26/2012 final rule did not include a revision to 1910.1020*

Information and Training

1910.1200(h)

- Training provided to employees upon:
 - Initial employment
 - When new hazards are introduced into the workplace

- **Information**
 - Requirements of this section

 - Operations in their work area where hazardous chemicals are present

 - Location and availability:
 - Written hazard communication program
 - List(s) of hazardous chemicals
 - Safety data sheets

● Training

- Methods and observations to detect presence or release of chemicals
- Physical, health, simple asphyxiation, combustible dust and pyrophoric gas hazards
- Hazards not otherwise classified
- Measures to protect themselves
- Details of the hazard communication program:
 - » An explanation of the labeling system
 - » Safety data sheets
 - » How employees can obtain/use the appropriate hazard information

Trade Secrets

1910.1200(i)

- Under the **N.C. Right to Know Act (NCGS 95-173, Article 18)**, hazard information on chemicals deemed as a trade secret are to be provided to the local fire chief, who must hold the information in confidence.
- Chemical manufacturers, importers or employers may withhold specific information from the SDS.
 - They must be able to support that the information withheld is a trade secret.

● Emergencies

- Where a treating physician or nurse determines that a medical emergency exists, the chemical identity and/or specific percentage of the composition of the trade secret must be disclosed.

Medical Emergency

Trade Secrets

1910.1200(i)(3)

● Non-emergencies

– Disclose to health professional if:

» Requested in writing; *and*

» Describes one or more occupational health need

- Used to assess an employee's exposure
- Provide medical treatment
- Design engineering controls
- Assessing hazards
- Conducting medical surveillance
- Assessing personal protective equipment
- Conducting medical studies

Summary

- In this course, we discussed the following:
 - Purpose and scope of hazard communication in the workplace
 - Role management and employee's responsibilities in complying with this standard
 - General requirements regarding chemical hazard classifications
 - Requirements for an effective written hazard communication program

Thank You For Attending!

Final Questions?