

Overview of OSHA's Alignment with the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals

CT DEEP: Hazardous Waste Advisory Committee
Public Forum
June 19, 2014

Anne Bracker, MPH, CIH
CONN-OSHA



Outline

- Why OSHA Adopted the GHS
- OSHA's Revised Hazard Communication Standard
- What Steps Should Employers Take Now?
- Compliance Assistance Resources

Why OSHA Adopted the GHS

Hazard Communication (1910.1200)

- Inventory of hazardous chemicals
- MSDSs and Labels
- Employee Training
- Written Program

Program depends on the quality of the
MSDSs and Labels

Material Safety Data Sheet


Section 1: Identification

Date Effective..... January 8, 2009
(most recent revision)

Chemical Name/Synonyms... Glutaraldehyde; 1,5-Pentanedial; Glutaral;

Emergencies
Contacting

Product or Trade Name.... SPI #02605-BA, 02607-BA, Glutaraldehyde,
Aqueous Solution, 8-25%

Hazardous Material Information System USA	Health	3	National Fire Protection Association USA	
	Fire Hazard	0		
	Reactivity	1		
	Personal Protection			

NFPA Rating:
(estimated) Health: 3 ; Flammability: 0 ; Reactivity: 1

Chemical Formula..... $C_5H_8O_2$

Section 2 Composition

Component Name	CAS #	Percent	EINECS/ELINCS
Glutaraldehyde	111-30-8	8-25%	203-856-5
Water	7732-18-5	92-75%	231-791-2

Section 3: Hazard Identification

Emergency overview:

Appearance: Clear, colorless liquid.

Flash Point: None, Tag Closed Cup (ASTM D56)

Warning! Causes burns of eye, skin, digestive tract, respiratory tract. May cause sensitization. Harmful if swallowed, inhaled, or absorbed through skin. Aspiration hazard if swallowed - can enter lungs and cause damage.

Target Organs: Central nervous system, lungs, respiratory system, eyes, skin

Potential Health Effects

Eye: Liquid will cause severe and persistent conjunctivitis, including excess redness and swelling of the conjunctiva with profuse discharge. May develop severe corneal injury; permanent impairment of vision possible. Vapor will cause stinging sensations with excess tear production, blinking and redness of the conjunctiva. Seek medical attention immediately.

Skin: May cause skin sensitization May cause hives. Brief contact will cause itching with mild to moderate local redness and possible swelling. Prolonged contact may result in pain, severe redness and swelling, with ulceration, tissue destruction and possible bleeding into inflamed area. Contact with glutaraldehyde solutions may result in a harmless yellow or brownish discoloration of the skin.

Ingestion: Moderately toxic. May cause moderate to marked irritation and chemical burns of the mouth, throat, esophagus and stomach. May cause discomfort or pain in the chest and abdomen, nausea, vomiting, diarrhea, dizziness, faintness, drowsiness, thirst. Advanced cases may cause weakness, circulatory shock, collapse, coma, or death due to respiratory failure.

Aspiration hazard: May cause damage to the lungs.

Inhalation: Harmful if inhaled. Causes chemical burns to the respiratory tract. May cause bleeding from the nose, coughing, chest discomfort and tightness, difficulty breathing, and headache. May cause asthma and shortness of breath.

Chronic: Effects may be delayed. May aggravate an existing dermatitis. May cause skin sensitization and allergic reaction.



Glutaraldehyde 2-26%

Revised: 01/19/2011

Replaces: 07/13/2010

Printed: 09/28/2011

Section 1 - Product Description

Product Name: Glutaraldehyde 2-26%

Product Code(s):

Size: 500 mL

Chemical Name: Glutaraldehyde Solution

CAS Number: 111-30-8

Formula: See Section 3

Synonyms: 1,5-Pentanedione 2-26%

Distributor:

Chemical Information:

Section 2 - Hazard Identification

Emergency Overview: Irritating to eyes, respiratory system and skin. Causes severe burns. Avoid contact with eyes. Harmful if inhaled or swallowed.

Potential Health Effects:

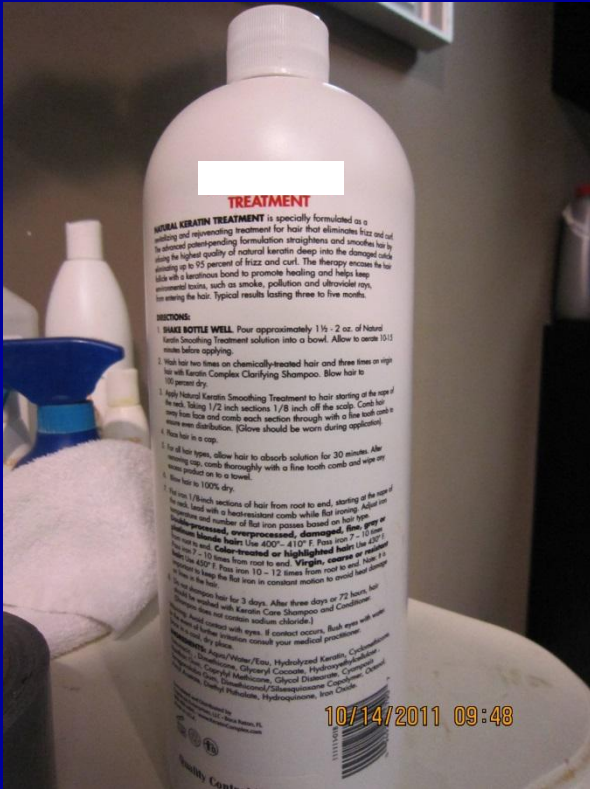
Eyes: May cause irritation.

Ingestion: May cause gastrointestinal discomfort.

Skin: May cause irritation to skin.

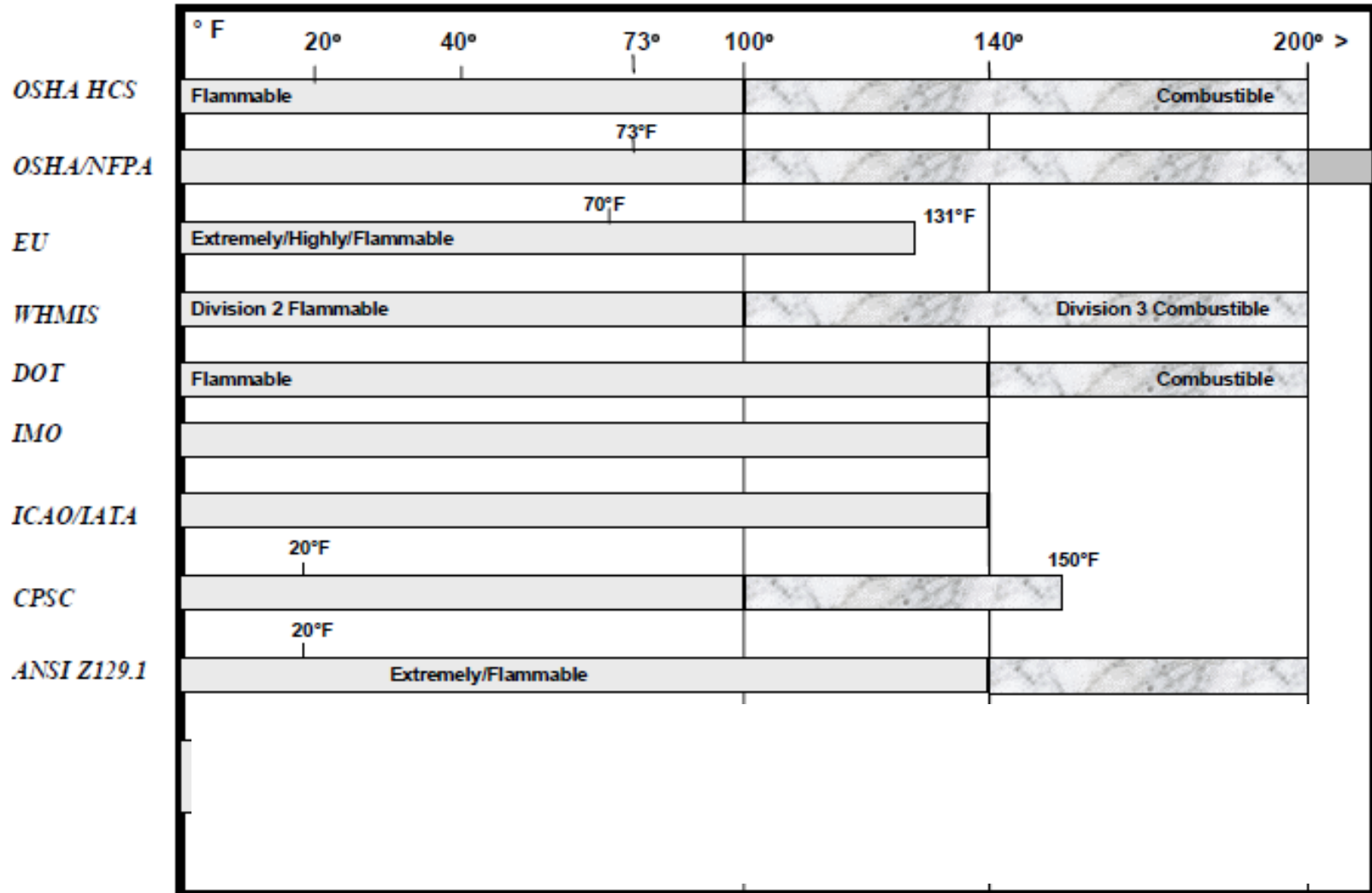
Inhalation: May cause irritation to respiratory tract.

Labels



Inconsistent Physical Properties

FLAMMABILITY



.... a global problem

- Inconsistencies and multiple requirements for labels and SDSs
- Different labels and safety data sheets often used for the same product
- Labels and SDS may include symbols and hazard statements that are unfamiliar

The GHS-

Designed to harmonize hazard classifications and hazard warnings

- Provide consistent information and definitions for hazardous chemicals
- Standard format for Labels
- Standard format for MSDSs (SDS)
- Increased understanding by using standardized pictograms and harmonized hazard statements

GHS Categories with Harmonized Classifications:

- Physical Hazards
- Health Hazards
- Environmental Hazards

Physical Hazards

- Explosives
- Flammable Gases
- Flammable Aerosols
- Oxidizing Gases
- Gases under Pressure
- Flammable Liquids
- Flammable Solids
- Self-Reactive Chemicals
- Pyrophoric Liquids
- Pyrophoric Solids
- Self-Heating Chemicals
- Chemicals which in contact with water emit flammable gases
- Oxidizing Liquids
- Oxidizing Solids
- Organic Peroxides
- Corrosive to Metal

Health Hazards

- Acute Toxicity
- Skin Corrosion/ Irritation
- Serious Eye Damage/ Eye Irritation
- Respiratory or Skin Sensitization
- Germ Cell Mutagenicity
- Carcinogenicity
- Reproductive Toxicity
- Specific Target Organ Toxicity Single Exposure
- Specific Target Organ Toxicity Repeated and Prolonged Exposure
- Sensitization
- Aspiration Hazard

Uniformity Oriented

Vs.

Performance Oriented

OSHA's Revised Hazard Communication Standard

- Conform to the Globally Harmonized System for the Classification and Labelling of Chemicals (GHS)
- Changes to
 - Hazard Classification
 - Content of Labels on Shipped Containers
 - Safety Data Sheet Content
- No Changes to
 - Scope and Exemptions
 - Written Hazcom Program
 - Labeling requirement
 - MSDS Distribution and Availability in the Workplace
 - Employee Information and Training (other than training on new labels and MSDS within 2 years)
 - Trade Secrets (except to include percentage)

Format of the Standard

- (a) Purpose
- (b) Scope and Application
- (c) **Definitions**
- (d) **Hazard Classification**
- (e) Written Hazard Communication Program
- (f) **Labels and Other Forms of Warning**
- (g) **Safety Data Sheets**
- (h) **Employee Information and Training**
- (i) Trade Secrets
- (j) **Effective Dates**
- Appendix A, Health Hazard Criteria (Mandatory) **NEW**
- Appendix B, Physical Hazard Criteria (Mandatory) **NEW**
- Appendix C, Allocation of Label Elements (Mandatory) **NEW**
- Appendix D, Safety Data Sheets (Mandatory) **NEW**
- Appendix E, Definition of “Trade Secret” (Mandatory)
- Appendix F, Guidance for Hazard Classifications re: Carcinogenicity (Non-Mandatory) **NEW**

(a) Purpose

HAZCOM 1994

- All hazards to be *evaluated*.

HAZCOM 2012

- All hazards to be *classified*.

Side-by-Side Comparison of OSHA's Existing Hazard Communication Standard (HCS 1994) vs. the Revised Hazard Communication Standard (HCS 2012)

This document provides a comparison of the changes from the existing Hazard Communication Standard (the current Hazard Communication Standard, 1910.1200, as published in the Code of Federal Regulations (CFR) on March 11, 1994; herein referred to as HCS 1994) and the final rule revising the Hazard Communication Standard to be consistent with the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (herein referred to as the HCS 2012).

The HCS 1994 is a performance-oriented standard that provides guidance for defining hazards and for performing hazard determinations. However, the current standard does not specify an approach or format to follow. The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) has certain aspects that are performance-oriented, but the key provisions are a *uniformity-oriented* approach for the classification and presentation, through labeling and safety data sheets, of hazard information.

The HCS 2012 is written as a modification to the existing standard, and those parts of the standard that do not relate to the GHS, or are already consistent with it remain unchanged. Additionally, some minor changes to terminology have been made in order to align this rule with language used in the GHS. For example, the term "hazard determination" has been changed to "hazard classification" and "material safety data sheet" has been changed to "safety data sheet."

The following side-by-side comparison shows the changes made to the HCS 1994 as stricken text in the left-hand column. Additions or changes made to the existing HCS (1994) to create the revised HCS (aligning the HCS with the GHS, and effective 2012) are shown as underlined text in the right-hand column.

Purpose.

The Hazard Communication Standard (HCS) 1994 includes a paragraph that describes the purpose of the HCS, and addresses preemption of state and local laws. The Hazard Communication Standard (HCS 2012) includes essentially the same paragraph as the HCS 1994. The primary modification to this paragraph is to state affirmatively that part of the purpose is to harmonize with international requirements. OSHA also clarified the standard's preemptive affect on State laws. Other than terminology, no additional substantive changes have been made in this paragraph of the HCS.

HCS 1994	HCS 2012
<p>(a) <i>Purpose.</i></p> <p>(a)(1) The purpose of this section is to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material-safety data sheets and employee training.</p> <p>(a)(2) This occupational safety and health standard is intended to address comprehensively the issue of evaluating the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees, and to preempt any legal requirements of a state, or political subdivision of a state, pertaining to this subject. Evaluating the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees, may include, for example, but is not limited to, provisions for: developing and maintaining a written hazard communication program for the workplace, including lists of</p>	<p>(a) <i>Purpose.</i></p> <p>(a)(1) The purpose of this section is to ensure that the hazards of all chemicals produced or imported are <u>classified</u>, and that information concerning the <u>classified</u> hazards is transmitted to employers and employees. <u>The requirements of this section are intended to be consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), Revision 3.</u> The transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, safety data sheets and employee training.</p> <p>(a)(2) This occupational safety and health standard is intended to address comprehensively the issue of <u>classifying</u> the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees, and to preempt any <u>legislative or regulatory enactments</u> of a state, or political subdivision of a state, pertaining to this subject. <u>Classifying</u> the potential hazards of chemicals and communicating</p>

(b) Scope and Application

Minimal changes

(c) Definitions

Physical hazard definitions removed from paragraph (c), and placed in a new Appendix B on physical hazard classification criteria.

Following terms are also deleted: flashpoint (methods included in Appendix B), hazard warning, material safety data sheets.

Some definitions are revised to be GHS-consistent.

New definitions added for hazard classification.

Definitions continued

- Hazardous Chemical: 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

(d) Hazard Classification

Each physical or health hazard is a “hazard class” (e.g., Carcinogenicity is a hazard class).

A “hazard class” may be sub-divided in the criteria into several “hazard categories” based on the degree of severity of the hazard.

Placing a chemical into a “hazard class” , and where necessary, a “hazard category”, is the concept of classification—determining not only the hazard, but also the severity of the effect.

The material contained in this presentation is the work of expert(s) selected by the US Department of Labor Occupational Safety and Health Administration and the Professional Development Committee of SCHC and are intended solely for the purpose of professional development and continuing education. Material in this presentation does not constitute a recommendation or endorsement of any kind. This material is believed to accurately represent current regulatory requirements and industry standards of hazard communication. However, neither OSHA nor SCHC can guarantee the accuracy or completeness of this information beyond the date of initial presentation. Users are responsible for determining the suitability and appropriateness of these materials for any particular application.

Health Hazards

Hazard Class	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			
Simple Asphyxiants	Single Category			

Hazard Classes

- OSHA has adopted:
 - All physical hazard classes
 - All health hazard classes but does not adopt the following categories
 - Acute toxicity category 5
 - Skin corrosion category 3
 - Eye irritation category 2B
 - Aspiration category 2
- OSHA will not adopt environmental hazards (has no jurisdiction)

Hazard Class

Hazard Category

Hazard Statement (H phrase)

Eg:

- Acute toxicity (inhalation)
- Category 4
- Harmful if inhaled (H332)

(e) Written Hazard Communication Program

- No changes
- List of Hazardous chemicals may need to be updated

(f) Labels and Other Forms of Warning

- Shipped containers
- Workplace labels (secondary labeling)

Standard Format for Labels on Shipped Containers

- Product identifier
- Signal word- DANGER or WARNING
- Hazard Statement (nature & degree of risk)
- Pictogram(s)
- Precautionary Statement (how the product should be handled to minimize risks)
- Name and Address of Company
- Telephone numbers

Product J

(abc chemical)



Danger

Fatal if swallowed
Causes skin irritation

Precautions:

Wear protective gloves.
Take off contaminated clothing and wash before reuse.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.

Store locked up.
Dispose of contents/containers in accordance with local regulations.

IF ON SKIN: Rinse skin with water/shower.



IF IN EYES: Rinse cautiously with water.

IF SWALLOWED: Immediately call a Poison Center or
doctor/physician. Do not induce vomiting.

ABC Chemical Co., 123 Anywhere St., (123) 456-7890
See the SDS for more information

HCS 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 (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)

Secondary Labeling

- Use the information specified 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 chemicals.....

Secondary Labeling

- Will you continue to use HMIS or NFPA?
- While the hazard category number does not appear on the label, consider:

GHS HAZARD

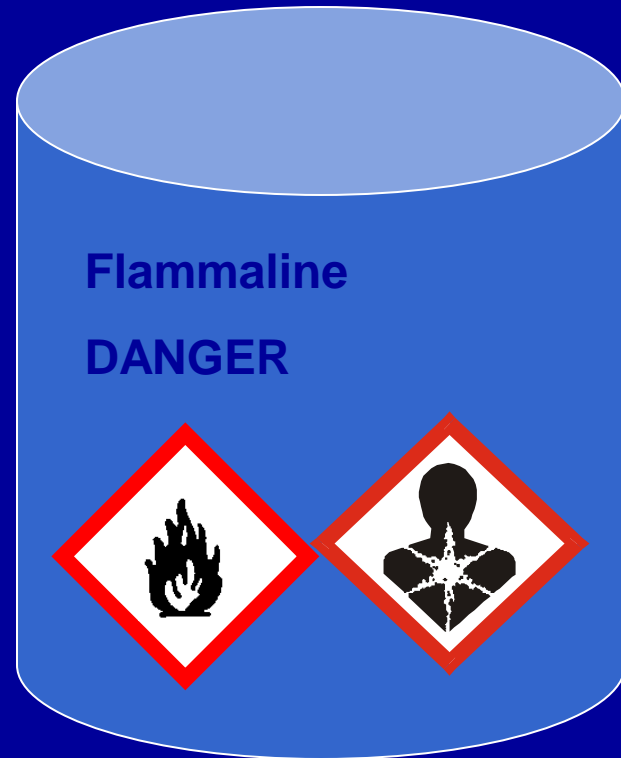
<u>Category</u>	<u>Hazard</u>
1	highest
2	high
3	medium
4	low

HMIS/NFPA

<u>Index</u>	<u>Hazard</u>
1	slight
2	moderate
3	serious
4	severe

Secondary Labeling

- Use of NFPA ratings may create confusion
- Consider using pictograms & signal word for secondary containers



(g) Safety Data Sheets

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

What might a SDS look like for a
product with 25%
Glutaraldehyde?

SAFETY DATA SHEET

Issue Date: 23 Feb 2010
Version No.: 00
Last Revision Date: (Supersedes Version: -)
Product No.:

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:
1.2 Product Code:
1.3 Recommended Use and Restriction on Use:
1.4 Manufacturer:
1.5 Address:
1.6 Business Phone Number:
Fax:
Emergency Phone Number:

SECTION 2: HAZARDS IDENTIFICATION

2.1 GHS Classification:

Hazard Class	Hazard Category	Hazard Statement
Acute toxicity (Oral):	Category 4	Harmful if swallowed.
Acute toxicity (Inhalation):	Category 4	Harmful if inhaled.
Skin corrosion/irritation:	Category 1	Causes severe skin burns and eye damage.
Respiratory sensitisation:	*Category 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation	*Category 1	May cause an allergic skin reaction.

*Glutaraldehyde

2.2 GHS label elements

Pictograms:



2.3 Signal Word: Danger

2.4 Precautionary Statements:

Prevention

Do not breathe dust/fume/gas/mist/vapours/spray.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash your hands and face thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
In case of inadequate ventilation wear respiratory protection.

Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTRE or doctor/physician.

SAFETY DATA SHEET

Issue Date: 23 Feb 2010
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Page 2 of 7

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Storage

Store locked up.

- 2.5 Disposal:
Dispose of contents/containers in accordance with local/national regulations.

Other Hazards Which Do Not Result in Classification

Primary Hazards

None

Specific Hazards

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance or Preparation: This product is a mixture.

Chemical Name	CAS No.	% by Weight
Glutaraldehyde	111-30-8	24 - 25
Water	7732-18-5	75 - 76

SECTION 4: FIRST-AID MEASURES

- 4.1 Inhalation:
- Move the victim into the fresh air, keep him or her warm and quiet, cover with a blanket, and send for immediate medical assistance.
 - If the victim is not breathing or is breathing very weakly, loosen his or her clothing in order to secure an airway and begin artificial respiration.
 - If the casualty is unconscious, but breathing, or is conscious but experiencing breathing difficulties, the provision of oxygen is effective. It is preferable to do this under medical supervision.
 - No medicine other than oxygen may be dispensed. No food may be given to the victim without the physician's direction.
- 4.2 Skin Contact:
- If it is spilled on the skin, wash off with copious amounts of soap and water.
 - Remove the contaminated clothes, shoes, etc., immediately. Cut the clothing off if necessary. Subsequently, rinse the skin with cool or tepid running water for at least 30 minutes.
 - Immediate medical attention is required.
- 4.3 Eye Contact:
- If a contact lens is in place, remove it and wash the eye with warm running water for at least 15 minutes, unless the lens is firmly attached to the eye. Use physiological saline if it is readily available.
 - Do not stop rinsing the eye. During the rinse, open the eyelid with your fingers so that water can reach under the eyelid. Send for an ophthalmologist immediately. An ophthalmological examination is absolutely essential because the possibility exists that there may be after effects even if there are no immediate pain or vision problems.
- 4.4 Ingestion:
- If it is swallowed, call a doctor immediately.
 - Do not attempt to make the victim vomit.
 - Rinse the mouth out thoroughly with water.
 - Give the casualty 1-2 glasses of water to dilute the quantity of the substance in the stomach. (If milk is readily available, this can be given to the casualty after the water.)
 - If the victim vomits of his/her own accord, bend his/her body so as to prevent vomit from entering the lungs. After vomiting, allow the victim to drink more water. Keep the victim warm and send for a doctor immediately and show SDS or label.

(h) Employee Information and Training

- New Label
- SDS Format

(i) Trade Secrets

Process remains the same.

Percentage of a substance in a mixture is also considered to be a type of trade secret subject to the provisions in the rule.

(j) Effective Dates

- December 1, 2013- Employers shall train employees regarding label elements and SDS format
- June 1, 2015- All other provisions effective
 - No difference in compliance dates for substances and mixtures
- During the three year period, compliance with either the current or the new final rule will be permitted

Effects on Other Standards

- Substance Specific Standards

Change workplace signs to make statements consistent with HCS

Revised standards to reference HCS for labels, SDS and training and the identified hazards to address

Effects on Other Standards

- Safety Standards

OSHA updated a number of safety standards to be consistent with the criteria in the HazCom 2012.

The manner in which this was done depended on the provisions of the standard being considered, and approaches varied.

OSHA sought to minimize the impact on the scope or substantive provisions of the standards that were updated

What Steps Should Employers Take Now?

- Have a HCS plan
- Confirm that you have a hazardous chemical inventory and a complete file of MSDSs
- Talk to your suppliers- ask about their plan to transition to GHS... request GHS compliant SDSs and labels
- Insure that you understand the hazard classes
- Review secondary labels
- Confirm employee training has been completed
- Track regulation

Compliance Assistance Resources

www.osha.gov

Updated Hazcom Webpage

Home Workers Regulations Enforcement Data & Statistics Training Publications Newsroom Small Business OSHA

**HAZARD COMMUNICATION**
The standard that gave workers the right to know, now gives them the right to understand.

[Safety & Health Topics Page: Hazard Communication](#)

[Labeling](#) [Safety Data Sheets](#) [Pictograms](#) [Effective Dates](#)


Dr. David Michaels discusses the publication of the Final Rule for Hazard Communication.
[Video](#) | [Statement](#)

"Exposure to hazardous chemicals is one of the most serious threats facing American workers today," said U.S. Secretary of Labor Hilda Solis. "Revising OSHA's Hazard Communication standard will improve the quality and consistency of hazard information, making it safer for workers to do their jobs and easier for employers to stay competitive."

The Hazard Communication Standard (HCS) is now aligned with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). This update to the Hazard Communication Standard (HCS) will provide a common and coherent approach to classifying chemicals and communicating hazard information on labels and safety data sheets. Once implemented, the revised standard will improve the quality and consistency of hazard information in the workplace, making it safer for workers by providing easily understandable information on appropriate handling and safe use of hazardous chemicals. This update will also help reduce trade barriers and result in productivity improvements for American businesses that regularly handle, store, and use hazardous chemicals while providing cost savings for American businesses that periodically update safety data sheets and labels for chemicals covered under the hazard communication standard.

Hazard Communication Standard

In order to ensure chemical safety in the workplace, information about the identities and hazards of the chemicals must be available and understandable to workers. OSHA's Hazard Communication Standard (HCS) requires the development and dissemination of such information:

- Chemical manufacturers and importers are required to evaluate the hazards of the chemicals they produce or import, and prepare labels and safety data sheets to convey the hazard information to their downstream customers;
- All employers with hazardous chemicals in their workplaces must have labels and safety data sheets for their exposed workers, and train them to handle the chemicals appropriately.

Highlights:

- [HCS/HazCom 2012 Final Rule](#)
 - **Federal Register:** The Final Rule was filed on March 20th at the Office of the Federal Register and available for viewing on their Public Electronic Inspection Desk. The Federal Register published the final rule on March 26, 2012. The effective date of the final rule is 90 days after the date of publication.
 - [Federal Register \(PDF, 52 MB\)](#)
- HCS Companion: HazCom 1994 and HazCom 2012
 - [Side-by-side](#)
 - [Rolling Strikeout of the Regulatory Text](#)
- [HazCom 1994](#)
- **Press Release:** US Department of Labor's OSHA publishes final rule to update the Hazard Communication Standard (HCS)
- **Guidance**
 - [OSHA Briefs \(PDF, 263 KB\)](#)
 - [Fact Sheet](#)
 - [Quick Cards](#)

Side By Side Comparison



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DEPARTMENT OF LABOR**

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← Hazard Communication

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HCS 1994	HCS 2012
<p style="font-size: x-small;">The Hazard Communication Standard (HCS) 1994 includes a paragraph that describes the purpose of the HCS, and addresses preemption of state and local laws. The Hazard Communication Standard (HCS 2012) includes essentially the same paragraph as the HCS 1994. The primary modification to this paragraph is to state affirmatively that part of the purpose is to harmonize with international requirements. OSHA also clarified the standard's preemptive affect on State laws. Other than terminology, no additional substantive changes have been made in this paragraph of the HCS.</p>	<p style="font-size: x-small;">The Hazard Communication Standard (HCS) 1994 includes a paragraph that describes the purpose of the HCS, and addresses preemption of state and local laws. The Hazard Communication Standard (HCS 2012) includes essentially the same paragraph as the HCS 1994. The primary modification to this paragraph is to state affirmatively that part of the purpose is to harmonize with international requirements. OSHA also clarified the standard's preemptive affect on State laws. Other than terminology, no additional substantive changes have been made in this paragraph of the HCS.</p>
<p style="font-size: x-small;">(a) <i>Purpose.</i></p> <p style="font-size: x-small;">(a)(1) The purpose of this section is to ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees. This transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, material-safety data sheets and employee training.</p> <p style="font-size: x-small;">(a)(2) This occupational safety and health standard is intended to address comprehensively the issue of evaluating the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees, and to preempt any legal requirements of a state, or political subdivision of a state, pertaining to this subject. Evaluating-the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees, may include, for example, but is not limited to, provisions for: developing and maintaining a written hazard communication program for the workplace, including lists of hazardous chemicals present; labeling of containers of chemicals in the workplace, as well as of containers of chemicals being shipped to other</p>	<p style="font-size: x-small;">(a) <i>Purpose.</i></p> <p style="font-size: x-small;">(a)(1) The purpose of this section is to ensure that the hazards of all chemicals produced or imported are <u>classified</u>, and that information concerning the <u>classified</u> hazards is transmitted to employers and employees. <u>The requirements of this section are intended to be consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), Revision 3.</u> The transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, safety data sheets and employee training.</p> <p style="font-size: x-small;">(a)(2) This occupational safety and health standard is intended to address comprehensively the issue of <u>classifying</u> the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees, and to preempt any <u>legislative or regulatory enactments</u> of a state, or political subdivision of a state, pertaining to this subject. <u>Classifying</u> the potential hazards of chemicals and communicating information concerning hazards and appropriate protective measures to employees, may include, for example, but is not limited to, provisions for:</p>

Outreach Materials

- » OSHA Briefs
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Hazard Communication Safety Data Sheets

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products. As of June 1, 2015, the HCS will require new SDSs to be in a uniform format, and include the section numbers, the headings, and associated information under the headings below:



Hazard Communication Standard Labels

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. A sample revised HCS label, identifying the required label elements, is shown on the right. Supplemental information can also be provided on the label as needed.

Contact Information

Anne Bracker, MPH, CIH

CONN-OSHA

(860) 263-6920

Bracker.Anne.L@dol.gov

<http://www.ctdol.state.ct.us/osha/osha.htm>