



Hazard Communication Update

A rectangular banner with a light green background. On the left side, the text "downstate illinois" is written in a grey, lowercase, sans-serif font, following the curve of a grey circle. Inside the circle, the number "24" is written in a large, bold, grey font, with the word "ANNUAL" in a smaller, grey, uppercase font to its right. Below the circle, the text "Occupational Safety & Health Day" is written in a bold, black, sans-serif font. On the right side of the banner, the date "March 4, 2015" is written in a bold, black, sans-serif font. Below the date, the location "Peoria Civic Center" and "Peoria, Illinois" is written in a smaller, black, sans-serif font, stacked in two lines.

What We Will Cover

- Approaching Deadlines in 2015
- Training requirements from December 1, 2013
- Guidance and Other Resources for Compliance
- International activities



Approaching Deadlines

- New labels and SDSs are required to be provided by manufacturers and importers by **June 1, 2015**
- Distributors can sell products with old labels until **December 1, 2015**
- Employers have until **June 1, 2016** to make adjustments to their workplace HazCom for any hazards identified with the GHS (substances and mixtures)



Before HazCom 2012

- Employers required to provide effective information and training on the hazardous chemicals in their work areas
 - At the time of initial assignment to work with a chemical
 - When a new chemical hazard is introduced into the work area
- May be done by chemical, or by hazard
- Manufacturer / importers communicated hazard determinations on labels and in MSDSs



HazCom 2012

- March 2012 - OSHA aligned its Hazard Communication Standard (HCS) with the Globally Harmonized System (GHS)
 - Provides employers a common, understandable classification of hazard information on labels and safety data sheets worldwide.
 - Provides employees easily understood information for handling and use of hazardous chemicals.
 - Reduce trade barriers for businesses that regularly handle, store, and use hazardous chemicals.
 - Provide cost savings for businesses that periodically update safety data sheets and labels for chemicals



HazCom 2012

3-Major Revisions for GHS

- 1. Hazard Classification:** Modified standards for hazard evaluation used by chemical manufacturers and importers.
- 2. Labels:** Labels include a signal word, pictogram, hazard statement, and precautionary statement for each hazard class and category.
- 3. Safety Data Sheets (SDS):** Consistency in new (16)-section format



HazCom 2012

Training Requirements

- Employers shall train employees regarding the new label elements and safety data sheet format by December 1, 2013
 - No requirement to re-train on all hazards
- Employees needed to understand the new label and SDS approach



HAZARD CLASSIFICATION



Classification

- HazCom 2012 covers workplace hazards
- For effects such as sensitization or CMRs (carcinogens, mutagens, reproductive hazards) that have a hazard category that is divided into sub-categories A and B:
 - If the data is available, then you must classify into the most hazardous sub-category
 - If the data does not allow classification into the sub-category, then you may use the category
- You may include GHS hazard categories that are not covered by the HCS



Combustible Dust

- HazCom 2012 does not define combustible dust
 - OSHA's Combustible Dust National Emphasis Program Directive CPL 03-00-008
 - NFPA standards
- Materials that present a combustible dust hazard in their shipped form must be labeled
- The SDS must include the following information:
 - List the classification in Section 2
 - Signal word (Warning)
 - Hazard statement



Combustible Dust, cont.

- Special labeling provision (f)(4): label may be shipped with the safety data sheet for solid materials that present a hazard only when processed or used downstream
- On March 25th, 2013, OSHA published a letter of interpretation on combustible dust and the labeling requirements



Pyrophoric Gases

- Definition unchanged in the HCS.
- Pyrophoric gases must be addressed both on container labels and SDSs.
- OSHA has provided label elements for pyrophoric
 - Signal word, "danger"
 - Hazard statement, "catches fire spontaneously if exposed to air"



Simple Asphyxiants

- OSHA has revised the definition
- Simple asphyxiants must be labeled and be addressed on SDSs
- OSHA has provided label elements for simple asphyxiants
 - Signal word "warning"
 - Hazard statement "may displace oxygen and cause rapid suffocation"



Pesticides

- OSHA has maintained exemption for FIFRA labels
- SDSs are required for workplaces under OSHA's jurisdiction
- Stakeholders were concerned about conflicts between EPA label and the OSHA SDS
 - Signal words
 - Chronic effects
- EPA has published a Pesticide Registration Notice (PRN 2012-1)



LABELS



Labels

- A DOT label (placard) is required for transport. An OSHA/HCS label is required for the workplace
- DOT and HCS labels may appear for the same hazard, depending upon the container's use
- Consumer products subject to CPSC labeling requirements are exempted from the labeling requirements of the HCS



Labels

- No size or format requirements for labels
- Small Packages
 - No exemptions for small packages
 - OSHA provides practical accommodations on a case-by-case basis
- Pictograms
 - Blank pictograms are not permitted on a label
 - Red border

Workplace Labeling

- Workplace Labeling
 - No change to general workplace labeling requirements
 - HMIS labels and NFPA ratings, by themselves, are not sufficient for workplace labels
 - NFPA rating systems used for emergency response
- Before the June 1, 2016 deadline, employers may use labels compliant with HCS 1994



Workplace Labeling, Cont.

- Workplace labeling may include other written materials including
 - signs,
 - placards,
 - process sheets,
 - batch tickets,
 - operating procedures.
- Any of these labeling methods or a combination thereof may be used instead of a label from the manufacturer, importer or distributor as long as the employees have immediate access to all of the information about the hazards of the chemical.
- Workplace labels must be in English. Other languages may be added to the label if applicable.



The HCS Label

SAMPLE LABEL

<p>CODE _____ Product Name _____</p>	}	<p>Product Identifier</p>	<p>Hazard Pictograms</p> 
<p>Company Name _____ Street Address _____ City _____ State _____ Postal Code _____ Country _____ Emergency Phone Number _____</p>	}	<p>Supplier Identification</p>	<p>Signal Word Danger</p>
<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.</p> <p>In Case of Fire: use dry chemical (BC) or Carbon Dioxide (CO₂) fire extinguisher to extinguish.</p> <p>First Aid If exposed call Poison Center. If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.</p>			<p>Precautionary Statements</p>
			<p>Hazard Statements</p> <p>Highly flammable liquid and vapor. May cause liver and kidney damage.</p>
<p>Supplemental Information</p> <p>Directions for Use</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Fill weight: _____ Lot Number: _____ Gross weight: _____ Fill Date: _____ Expiration Date: _____</p>			

HCS Pictograms and Hazards

Eight mandatory symbols

<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)

HCS Signal Words

- Signal words indicate the severity of the hazard
- Only two words used as signal words
 - “Danger” used for the more severe hazards
 - “Warning” used for the less severe hazards
- Only one signal word on the label no matter how many hazards a chemical may have.
- If one of the hazards warrants a “Danger” signal word and another warrants the signal word “Warning,” then only “Danger” should appear on the label.



HCS Precautionary Statements

- Hazard Statements describe the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.
 - “Causes damage to kidneys through prolonged or repeated exposure when absorbed through the skin.”
- Hazard statements may be combined where appropriate to improve readability.
- Hazard statements are specific to the hazard classification categories and users should always see the same statement for the same hazards no matter what the chemical is or who produces it.



HCS Precautionary Statements Cont.

- Precautionary Statements describe recommended measures to minimize or prevent adverse effects resulting from exposure to the hazardous chemical or improper storage or handling.
- There are four types of precautionary statements
 - Prevention
 - Response (in case of accidental spillage or exposure emergency response, and first-aid)
 - Storage
 - Disposal



HCS Precautionary Statement Cont.

A chemical presenting a specific target organ toxicity (repeated exposure) hazard would include the following on the label:

“Do not breathe dust/fume/gas/mist/vapors/spray. Get medical advice/attention if you feel unwell. Dispose of contents/container in accordance with local/regional/ national and international regulations.”



HCS Precautionary Statement Cont.

- Precautionary statements are typically independent.
- OSHA allows flexibility for applying precautionary statements to the label, such as combining statements, using an order of precedence
- The most stringent statements must be included on the label when a chemical has multiple hazards.
- Manufacturer / importer may eliminate a precautionary statement if it can demonstrate that the statement is inappropriate.



Supplementary Information

- Manufacturers / Importers may provide additional instructions or information
 - Hazards Not Otherwise Classified (HNOC)
- This section must identify the percentage of ingredient(s) of unknown acute toxicity when it is present in a concentration of $\geq 1\%$ (and the classification is not based on testing the mixture as a whole)

Supplementary Information Cont.

- Personal protective equipment (PPE) pictogram
- Hazardous Materials Identification System (HMIS) pictogram of a person wearing goggles may be listed.
- Directions of use,
- Expiration date,
- Fill date
- Any additional information specific to the process in which the chemical is used

SAFETY DATA SHEETS



Safety Data Sheets

- Distribution
 - An updated SDS must be provided with products shipped by June 1, 2015
 - Companies are not required to send new SDSs to previous customers who may still have the product in inventory
 - New SDSs do not have to be provided for chemicals no longer produced

Safety Data Sheets, cont.

- Employers must maintain and make available the most recent MSDS or SDS received from a chemical manufacturer, importer, or distributor for each hazardous chemical in the workplace.
- If the employer is not maintaining the most current MSDS or SDS received, then enforcement action may occur.
- OSHA would not issue citations for maintenance of MSDSs when SDSs have not been received.
- Employers may, but are not required to, contact manufacturers or distributors of products they have previously ordered to request new SDSs and under 1910.1200(g)(6)(vi), the SDSs must be provided.



Safety Data Sheets, cont.

- 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.



Safety Data Sheets, cont.

- 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.



Safety Data Sheets, cont.

- 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.

*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15



Safety Data Sheets, cont.

- The requirements to maintain MSDSs or SDSs under 29 CFR 1910.1020 have not changed
- The conditions under which employers may maintain SDSs electronically in the workplace have not changed
- Section headings for SDS sections 12-15 must still be listed on the SDS;
- SDSs must be in English; they may also be kept in other languages
- A red border is not required for pictograms on SDSs
- Hazards Not Otherwise Classified should be described in Section 2 of the SDS



Safety Data Sheets, cont.

- Component disclosure on SDSs
 - In all cases the concentration ranges must have no effect on the hazard of the mixture
 - Options for using ranges instead of exact percentages include trade secret, batch-to-batch variation, similar mixtures
 - With very small variances or tolerances during production, the anticipated percentage in the formula may be used

Trade Secrets

- For mixtures, the trade secret provisions apply to the individual chemicals and their associated CAS numbers
- When a company is claiming a percentage as a trade secret, a statement saying that information is withheld as a trade secret is required in SDS Section 3

Other Standards

- Laboratory standard was not changed, except for several definitions and an edit to Appendix A for SDSs
- Changes to other standards were made to minimize changes to scope. For example, the change to the definition of flammable liquid is expected to have minimal to no impact on PSM, flammable storage requirements

GUIDANCE, OUTREACH, AND INTERNATIONAL ACTIVITIES



Updated HazCom Web Page

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Hazard Communication

Aligns with the UN's Globally Harmonized System of Classification and Labeling of Chemicals

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.

Highlights:

- December 1, 2013 Training Requirements Fact Sheet [PDF*, 289 KB]
- OSHA Brief on Labels and Pictograms [PDF*, 427 KB]
- [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 60 days after the date of publication.
 - [Federal Register](#) [PDF*, 52 MB]
- HCS Comparison: HazCom 1994 and HazCom 2012
 - [Side-by-side](#)
 - [Redline 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*, 260 KB]
 - [Fact Sheet](#)
 - [Quick Cards](#)
- [Downloadable Pictograms](#)
- [August 2012 OSHA/SCHA Alliance Webinar](#)
- [Downloadable Hazard Communications 2012 Presentation](#) [PPTX*,]
- [Question of the Month](#)

OSHA®

Guidance and Outreach, cont.

OSHA guidance materials (Free)

- Initial Materials
 - Quick cards; OSHA briefs; booklets; small entity compliance guides; wallet-sized card
- Technical Materials
 - Model training materials; Safety Data Preparation guidance; Hazard Classification Guidance
- Web Applications
 - SDS Electronic Form; Label Elements Application; Acute Toxicity Calculator



Updated Webpages

- HazCom 2012 Webpage
<http://www.osha.gov/dsg/hazcom/index.html>
- Safety & Health Topics Webpage
<http://www.osha.gov/dsg/hazcom/index2.html>
- UN GHS Sub-Committee Home Page
http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html



International Harmonization

- UN Sub-committee: *Globally Harmonized System of Classification and Labelling of Chemicals (GHS)*
 - GHS allows choices
 - Meets twice a year to discuss issues
 - Implementation issues
 - Practical classification Issues
 - Other harmonization issues
 - Works on two year cycles (Biennium)
 - HazCom 2012 is GHS Rev. 3
 - *Technical updates for minor terminology changes,*
 - *Direct Final Rules for text clarification, and*
 - *Notice and Comment rulemaking for more substantive or controversial updates*



International Harmonization, cont.

- OSHA
 - Supported the international mandate to develop the GHS
 - Negotiate the provisions of the GHS
 - Leads the US delegation to the United Nations' Committee and Sub-committee on the GHS
- Interagency Group
 - OSHA, EPA, State, DOT, CPSC, US Coast Guard



Additional Information

- OSHA GHS information
<http://www.osha.gov/SLTC/hazardcommunications/global.html>
- EPA GHS information
<http://www.epa.gov/oppfead1/international/globalharmon.htm>
- DOT GHS information
<http://hazmat.dot.gov/regs/intl/globharm.htm>
- GHS text, UN papers and reports
<http://www.unece.org/trans/danger/danger.htm>



Joneen McElligott

(309) 589-7033

McElligott.Joneen@dol.gov

