



# Upcoming Changes To The HazComm Standard Bring New Challenges

Plastic Shipping Container Institute  
Semi-Annual Meeting  
Chicago, IL  
October 28, 2014

# Topics

- Key deadlines
- Overview of the Hazard Communication Standard
- GHS revisions to the Standard
- New requirements for Safety Data Sheets
- Information resources

# Key Deadlines Are Coming Up Quickly

Effective Completion Date	Requirement(s)	Who
December 1, 2013	Train employees on the new label elements and safety data sheet (SDS) format.	Employers
June 1, 2015 December 1, 2015	Compliance with all modified provisions of this final rule, except: The Distributor shall not ship containers labeled by the chemical manufacturer or importer unless it is a GHS label	Chemical manufacturers, importers, distributors and employers
June 1, 2016	Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards.	Employers
Transition Period to the effective completion dates noted above	May comply with either 29 CFR 1910.1200 (the final standard), or the current standard, or both	Chemical manufacturers, importers, distributors, and employers

# The Hazard Communication Standard Is A Worker Right-To-Know Regulation

- Promulgated by OSHA and authorized under the Occupational Safety and Health Act of 1970
- Located at 29 C.F.R. Section 1910.1200
- Purpose: to ensure that chemical hazards are classified and that information about the classified hazards is transmitted to employers and employees.
- Entities subject to the HCS:
  - Chemical manufacturers and importers
  - Distributors (including retail distributors)
  - Employers

# The HCS Applies to Chemicals Present in the Workplace

- The HCS applies to any chemical known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency. 29 C.F.R. section 1910.1200(b)(2)
  - Employee: a worker who may be exposed to hazardous chemicals under normal operating conditions or foreseeable emergencies. 29 C.F.R. section 1910.1200(c)
    - Hazardous chemical: any chemical which is classified as a physical hazard or a health hazard, a simply asphyxiant, combustible dust, pyrophoric gas or hazard otherwise not classified. 29 C.F.R. section 1910.1200(c)

# The HCS Does Not Cover Consumer Products

## – Except When It Does (29 C.F.R. section 1910.1200(b)(6)(ix))

- The HCS explicitly excludes consumer products and hazardous substances from its scope if:
  - They are used in the workplace in the manner intended by the manufacturer; and
  - The use results in a duration or frequency of exposure that is not greater than those that consumers experience
- It is the employer's responsibility to make this determination, and to request an SDS if these conditions are not met
- “Consumer product” and “hazardous substance” are the same as those terms are defined under the Consumer Product Safety Act (15 U.S.C. sections 2051 et seq.) and the Federal Hazardous Substances Act (15 U.S.C. sections 1261 et seq.)

# The HCS Does Not Cover Articles – Except When It Does (29 C.F.R. section 1910.1200(b)(6)(v))

- Section 1910.1200(c) defines “article”: a manufactured item other than a fluid or particle
  - Which is formed to a specific shape or design during manufacture;
  - Which has end use function(s) dependent in whole or in part on its shape or design during end use; and
  - Which, under normal conditions of use, does not release other than very small (minute or trace) amounts of a hazardous chemical **and** does not pose a physical hazard or health risk to employees
- The third prong is the tricky prong:
  - The item cannot release any more than minute or trace amounts of a hazardous chemical. Even then, that minute or trace amount cannot pose a physical hazard or health risk. See 53 Fed. Reg. at 29832-33
  - To the extent that a manufactured item cannot meet the third prong of the definition, it is “inappropriate and irrelevant” to apply the hazard disclosure requirements to the entire article. 59 Fed. Reg. at 6147
  - Rather, the required hazard classification and SDS information pertain **only** to the chemical constituents that are released. 53 Fed. Reg. at 29831

# The HCS Has Five Key Elements

Element	Who's Responsible?
Hazard classification**	Chemical manufacturers and importers
Written haz comm program	Employers
Labels and other forms of warning**	Chemical manufacturers, importers and distributors – ensure labels are on containers of hazardous chemicals leaving the workplace  Employers – containers of hazardous chemicals in the workplace
Safety Data Sheets**	Chemical manufacturers /importers: must develop and transmit  Distributors – must transmit  Employers – must maintain
Employee information and training**	Employers

# OSHA Amended The HCS in 2012 To Incorporate Elements of the GHS

- GHS is the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals
  - International consensus-driven system for hazard communication
  - Not intended to be adopted verbatim
  - Establishes criteria and provisions that regulatory authorities can incorporate into their own systems of hazard communication
- Revisions made to:



# The 2012 HCS Made Hazard Classification More Complex

(29 C.F.R. section 1910.1200 (d) and Appendices A and B)

## 1994 HCS

- Evaluation must be performed considering available scientific evidence
- Broad definitions of hazards
- Evaluator determines whether data meets hazard definitions
- Performance oriented

## 2012 HCS

- Evaluation must be performed considering available scientific evidence
- Specific criteria for hazard classes
- Hazard categories established within hazard classes
- Detailed instructions and formulas for hazard classification and categorization

# The 2012 HCS Made Hazard Classification More Complex (cont.)

(29 C.F.R. section 1910.1200 (d) and Appendices A and B)

- Weight of evidence approach
  - May “rely” on NTP and IARC classifications
  - Non-mandatory Appendix F provides additional guidance on classification of carcinogenicity
- A tiered approach for analysis
- Mixture rules are specific for each hazard class
  - Consider data on mixture as a whole
  - Use of “bridging principles” to estimate hazard based on information about components
  - Use of cut-off values, which depend on the nature of the hazard
    - For acute toxicity, specific formulas must be used (Appendix A, Section A.1.3.6 or A.1.3.6.2.3)

# The 2012 HCS Imposes New Labeling Requirements

(29 C.F.R. section 1910.1200(f) and Appendix C)

- **Product identifier**
  - Must be the same as on Safety Data Sheet
- **Name, address, telephone number** of manufacturer or responsible party
- **Signal word**
  - “Danger” or “Warning”
  - Which one to use depends on nature of hazard
- **Hazard statement(s)** – which one to use depends on the nature of hazard
- **Pictogram(s)** – which one to use depends on nature of hazard
- **Precautionary statement(s)** – which one to use depends on nature of hazard
- Appendix C sets out rules for precedence of hazard information, e.g., if signal word “Danger” is included, cannot also include “Warning”

# HCS Pictograms and Hazards

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

# Label Example

Xyz... Chemical



**WARNING**  
Flammable Liquid and vapor  
Harmful if swallowed  
May cause damage to organs (liver)  
May cause damage to organs through prolonged or repeated exposure (heart)  
Suspected of damaging fertility

Keep away from heat, sparks, open flames and hot surfaces - No smoking. Do not breathe vapors. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use protective equipment as required. Wear protective gloves and eye protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Keep container tightly closed. Ground container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Store locked up in a well ventilated place. Keep cool. Dispose of contents and container in accordance with local, state and federal regulations.

**First Aid:**  
If swallowed: Call a doctor if you feel unwell, Rinse mouth.  
If on skin or hair: Remove immediately all contaminated clothing. Rinse skin with water.  
If exposed or if you feel unwell: call a doctor.

**Fire:**  
In case of fire: Use water spray foam, dry chemical or carbon dioxide (CO<sub>2</sub>) for extinction

GHS Company, 123 Global Drive, Cincinnati, OHtelephone (800) 555-8888

# The 2012 HCS Establishes New Requirements for SDSs

(29 C.F.R. section 1910.1200(g))

***Meet the new boss  
Same as the old boss***

-- Pete Townshend



# The 2012 HCS Establishes New Requirements for SDSs (cont.)

(29 C.F.R. section 1910.1200(g) and Appendix D)

- 2012 HCS: mandatory 16-section format (like ANSI Z400.1 and Z129.1)
  - Information must appear in the same order as set forth in Section 1910.1200(g)(2) and use the same headings
  - Appendix D sets out the information requirements

# The 2012 HCS Establishes New Requirements for SDSs (cont.)

(29 C.F.R. section 1910.1200(g) and Appendix D)

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 controls/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 (including date of preparation or last revision)

# The 2012 HCS Establishes New Requirements for SDSs (cont.)

(29 C.F.R. section 1910.1200(g) and Appendix D)

- Must identify chemical name of all ingredients that are classified as health hazards and are
  - Present above their cut-off/concentration limits, or
  - Present a health risk below the cut-off/concentration limits
- Must identify exact chemical concentration
  - Concentration ranges may be used
    - For protection of trade secret, or
    - Where there is batch to batch variability, or
    - For a group of substantially similar mixtures
- Must include OSHA Permissible Exposure Limits, ACGIH Threshold Limit Values, NTP and IARC classifications when available
- No blanks allowed

# The 2012 HCS Establishes New Requirements for SDSs (cont.)

(29 C.F.R. section 1910.1200(g) and Appendix D)

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

# A Quick Note About “Hazards Not Otherwise Classified”

- These are hazards not addressed by the GHS
  - Intended to preserve, not expand, current scope of the HCS
- Defined as:
  - 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. This does not extend coverage to adverse physical and health effects for which there is a hazard class addressed in this section, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA (e.g., acute toxicity Category 5)
- HNOCs need not be identified on the label, but must be identified in Section 2 of the SDS

# But Many Old MSDS Requirements and Interpretations Remain in Effect

(29 C.F.R. section 1910.1200(g))

## Manufacturers and Importers

- Provide SDS with initial shipment and first shipment after update
- Provide SDS to distributor or employer upon request
- Update SDS within 3 months of new info about hazard or protection

## Distributors

- Provide SDS to distributors and employers with initial shipment and with first shipment after update
- Retailer distributors with commercial accounts must provide SDSs to those employers and post signs that SDSs are available
- Wholesalers may make SDSs available to employers and must post signs that SDSs are available

## Employers

- Maintain SDSs and make them available to employees

# But Many Old MSDS Requirements and Interpretations Remain in Effect (cont.)

(29 C.F.R. section 1910.1200(g))

- The SDS is **not** intended to convey information about risk
  - The HCS is premised on the principle that employees are entitled to information regarding any chemical which is hazardous, prior to any exposure. 53 Fed. Reg. at 29834
  - OSHA deliberately rejected aspects of the GHS allowing the consideration of risk in determining some categories information to be provided in SDSs. 77 Fed. Reg. at 17727
- The employer, who is best-positioned to know about extent of exposures, is the entity responsible for considering risk, as appropriate, in its employee training and must incorporate workplace-specific information in its employee training program. 48 Fed. Reg. at 53307

# But Many Old MSDS Requirements and Interpretations Remain in Effect (cont.)

(29 C.F.R. section 1910.1200(g))

Once the manufacturer has classified the chemical, the specific communication provisions apply only to those chemicals found to be hazardous.

48 Fed. Reg. at 53296

SDSs prepared for articles and other exempt products to respond to customer requests, etc., should state that SDSs are not required.

59 Fed. Reg. at 6163

Precautionary measures must be consistent with the hazard. Where the SDS states that a product or ingredient is nonhazardous, it is inappropriate to then recommend precautionary measures.

59 Fed. Reg. at 6163

Trade secret protection exists for chemical identification and for concentration.

29 C.F.R. section 1910.1200(i)

# The 2012 HCS Imposes A New Employee Information and Training Requirement

(29 C.F.R. section 1910.1200(h))

- To accommodate the 2012 revisions
- Training must include
  - Training on the physical, health, simple asphyxiation, combustible dust and pyrophoric gas hazards, as well as hazards not classified, of the chemicals in the work area;
  - The details of the hazard communication program, including an explanation of the labels and the safety data sheet

# Key Deadlines Are Coming Up Quickly - Redux

Effective Completion Date	Requirement(s)	Who
December 1, 2013	Train employees on the new label elements and safety data sheet (SDS) format.	Employers
June 1, 2015 December 1, 2015	Compliance with all modified provisions of this final rule, except: The Distributor shall not ship containers labeled by the chemical manufacturer or importer unless it is a GHS label	Chemical manufacturers, importers, distributors and employers
June 1, 2016	Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards.	Employers
Transition Period to the effective completion dates noted above	May comply with either 29 CFR 1910.1200 (the final standard), or the current standard, or both	Chemical manufacturers, importers, distributors, and employers

# OSHA Has A Great Website

- <https://www.osha.gov/dsg/hazcom/>
  - The amended HCS
  - Guidance documents
  - 77 Federal Register 17574 (March 26, 2012)

# Thank you....

Ann Grimaldi  
Grimaldi Law Offices  
50 California St. #1500  
San Francisco, CA 94111

415-463-5186

[ann.grimaldi@grimaldilawoffices.com](mailto:ann.grimaldi@grimaldilawoffices.com)

[www.grimaldilawoffices.com](http://www.grimaldilawoffices.com)