Global Harmonization: The New Face of HazCom
Based on United Nations initiative to develop global standards for classification & communication of chemical hazards.
HCS/Hazcom2012

GHS legislation/standards have been passed in: New Zealand (01), Japan (06), Korea & Taiwan (08), EU (08), Indonesia (09), USA (2012)
Key Dates

Employees must be trained in the new standard by **December 2013**.

Employers in full compliance including updating workplace labels by **June 1, 2015**.

Distributors may ship products labeled under the old system until **December 1, 2015**.

Update workplace labeling & Hazcom Program as necessary, and provide additional employee training for newly identified physical or health hazards. **June 1, 2016**
Group Exercise
HAZCOM & GHS

- To review required EHS topics.
- Work as a Group to Answer Questions
- Cannot Use Resources, Internet, Notes etc.
Everybody Goes home Alive

Explosives, Self Reactives or Organic Peroxides

Flammable or Others – See Handout

Acute Toxicity, Fatal or Toxic

Gases Under Pressure

Irritant (Skin/Eye) or Others – See Handout

Oxidizer

Flammable or Others – See Handout

Health Hazard or Others – See Handout

Aquatic Toxicity or Environment

Corrosion, (Skin/Burns) Corrosive, or Eye Damage,
GHS Resource Packet

• Pictograms & Hazards
• NFPA 704 vs. HazCom 2012 Labels
• Sample GHS Label
• SDS- 16 Section Uniform Format
• SDS Minimum Information
Seems like a lot of “stuff”

Globally Harmonized System
Global Harmonization: The New Face of HazCom
Standardize

Safety Data Sheets

Classifications

Symbols & Labels
GHS Pictograms/Handout

- Oxidizer
- Flammable or Others – See Handout
- Explosives, Self Reactives or Organic Peroxides
- Acute Toxicity, Fatal or Toxic
- Corrosion, (Skin/Burns) Corrosive, or Eye Damage,
- Gases Under Pressure
- Health Hazard or Others – See Handout
- Aquatic Toxicity or Environment
- Irritant (Skin/Eye) or Others – See Handout
(Only) **Two** GHS Signal Words
Why?
Fire
“Fire” since it was invented
We all know what it is, of course
Global chemical business is more than a $1.7 trillion/year enterprise
6000 different ways
Pictures

>>

Words
Flammable Liquid Labeling
E = mc²

1905

Albert Einstein
1879 - 1955
SO WHAT?
Chemical manufacturers, suppliers, & distributors who operate internationally…

✓ Easier regulatory navigation to do business
✓ Won't have to create separate SDSs/Labels
For end users who receive chemicals

✓ Shift from “Right To Know” (about potential health hazards from exposure to workplace chemicals).

✓ To a “Right To Understand”
Just to read the label
On 55 Gallon Drum...

... no problem ?
Enough room on 1 gallon cans?
Under The Sink

In Our Garage
Seems like a lot of “stuff”

Globally Harmonized System
We’ve Standardized Before
We’ve Standardized Before

Going Strong since 1920s
OK, I’m ready to deal with GHS, let me at it!
GHS Secondary Container Labeling

- Secondary Container labeling requirements are here!
- Have our (up to date) chemical inventory.
- SDS’s available to employees
Key Dates

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**June 1, 2016**
What has changed?

1. Criteria for the Classification of Chemical Hazards
2. Labeling Provisions
3. Specified Format for SDSs
4. Revision to the HazCom Standard
5. Employee Training Requirement
Hazard Classification

Health Hazards
Physical Hazards
Environmental Hazards
Hazards Not Otherwise Classified
Understanding Hazard Categorization

Example: Acute Dermal Toxicity - Category 1

Hazard Class

Hazard Category (Severity of Hazard)
## Comparison of NFPA 704 and HazCom 2012 Labels

<table>
<thead>
<tr>
<th></th>
<th>NFPA 704</th>
<th>HazCom 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Provides basic information for emergency personnel responding to a fire or spill and those planning for emergency response.</td>
<td>Informs workers about the hazards of chemicals in workplace under normal conditions of use and foreseeable emergencies.</td>
</tr>
<tr>
<td><strong>Number System:</strong></td>
<td>0-4&lt;br&gt;0-least hazardous&lt;br&gt;4-most hazardous</td>
<td>1-4&lt;br&gt;1-most severe hazard&lt;br&gt;4-least severe hazard&lt;br&gt;• The Hazard category numbers are NOT required to be on labels but are required on SDSs in Section 2.&lt;br&gt;• Numbers are used to CLASSIFY hazards to determine what label information is required.</td>
</tr>
</tbody>
</table>

*NFPA® OSHA® QUICK CARD™*
Labeling Requirements

1. Product Identifier
2. Signal Words
3. Hazard Statements
4. Precautionary Statements
5. Supplier Identification (Name, address, & phone of the chemical manufacturer, importer, or other responsible party.)
6. Hazard Pictograms
Specified Format for SDSs

Section 1, Identification
Section 2, Hazard(s) Identification
Section 3, Composition/Ingredients
Section 4, First-aid Measures
Section 5, Fire-fighting Measures
Section 6, Accidental Release Measures
Section 7, Handling and Storage
Section 8, Exposure Controls/Personal Protection

Section 9, Physical /Chemical Properties
Section 10, Stability and Reactivity
Section 11, Toxicological Information
Section 12, Ecological Information
Section 13, Disposal Considerations
Section 14, Transport Information
Section 15, Regulatory Information
Section 16, Other Information

• Updated to align with the adopted GHS Standard, Revision 3.

• The rule became effective May 25, 2012.
Employee Right to Understand

As of December 2013 all employees were required to be trained on Safety Data Sheets and Labels.
Hazard communication is addressed in specific standards for the general industry, shipyard employment, marine terminals, longshoring, and the construction industry. This page highlights OSHA standards, preambles to final rules (background to final rules), directives (instructions for compliance officers), and standard interpretations (official letters of interpretation of the standards) related to hazard communication.

Note: Twenty-five states, Puerto Rico and the Virgin Islands have OSHA-approved State Plans and have adopted their own standards and enforcement policies. For the most part, these States adopt standards that are identical to Federal OSHA. However, some States have adopted different standards applicable to this topic or may have different enforcement policies.

Highlighted Standards

General Industry (29 CFR 1910)

- 1910 Subpart Z, Toxic and hazardous substances [related topic page]
  - 1910.1200, Hazard communication
    - 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)
  - 1910.1201, Retention of DOT markings, placards and labels
Enforcement Update

• 2/9/15 Memo Field Enforcement Guidelines
  https://www.osha.gov/dep/enforcement/hazcom_enforcement-memo.html
February 9, 2015

MEMORANDUM FOR: REGIONAL ADMINISTRATORS
THROUGH: DOROTHY DOUGHERTY
Deputy Assistant Secretary
FROM: THOMAS GALASSI, Director
Directorate of Enforcement Programs
SUBJECT: Enforcement Guidance for the Hazard Communication Standard’s (HCS) June 1, 2015 Effective Date

The purpose of this memorandum is to provide enforcement guidance on the June 1, 2015 effective date - the date by which chemical manufacturers, importers, distributors and employers must be in compliance with all modified provisions of the HCS, other than the two exceptions for distributors and employers at 29 CFR 1910.1200(j)(2)(i) and (ii). This enforcement guidance applies only to HCS 2012 compliance inspections of chemical manufacturers, importers, and distributors in their classification of hazardous chemicals and development of safety data sheets (SDSs) and labels for chemical mixtures.

Overview

This memorandum describes the Agency’s enforcement position on the HCS June 1, 2015 effective date for manufacturers and importers, including product formulators, that have exercised reasonable diligence and good faith to classify their chemical mixtures according to HCS 2012 and consequently develop HCS 2012-compliant SDSs and labels. However, due to circumstances beyond their control, they have not received classifications and SDS information from upstream suppliers of raw materials. In addition, this enforcement guidance addresses when manufacturers and importers must develop HCS 2012-compliant SDSs and labels after receiving upstream supplier SDSs, as well as how this guidance affects distributors.

June 1, 2015 Effective Date

The June 1, 2015 effective date applies to manufacturers and importers developing HCS 2012-compliant SDSs and labels. In classifying mixtures, manufacturers and importers are permitted to rely on information provided on each SDS of the individual ingredients or components from the upstream supplier, except where the chemical manufacturer or importer knows, or in the exercise of reasonable diligence should know, that the SDS misstates or omits required information. 29 CFR 1910.1200(d)(3)(ii). For inspections occurring after the June 1, 2015 compliance date that involve a mixture that does not have an HCS 2012-compliant label or SDS, CSHOs shall follow the instructions herein. Where a manufacturer or importer has asserted that it was unable to comply with the June 1, 2015 compliance date, the CSHO must determine if the manufacturer or importer has exercised reasonable diligence and good faith to comply with the terms of the standard. CSHOs shall not cite a manufacturer or importer for failing to meet the June 1, 2015 deadline to have updated labels under 29 CFR 1910.1200(f)(1), or updated SDSs under paragraph (g)(1), if the chemical manufacturer or importer exercised reasonable diligence and good faith in attempting to obtain HCS 2012-compliant SDSs and classification information from its upstream raw material supplier(s). This guidance only applies where the mixture’s material safety data sheet (MSDS) and label comply with HCS 1994.

When necessary, OSHA will exercise its enforcement discretion to allow for a reasonable time period for manufacturers or importers to come into compliance. In contrast, on or after June 2, 2015, upstream raw material suppliers that do not have an HCS 2012-compliant SDS or label available for downstream manufacturers or product formulators of mixtures will not be in compliance. Upstream raw material suppliers must provide HCS 2012-compliant SDSs to downstream manufacturers or importers with the first shipment and after an SDS is updated, 29 CFR 1910.1200(n)(6)(i). If a...
Enforcement Update

• Interim Enforcement Guidance for Hazard Communication 2012 (HCS 2012) June 1, 2015 Effective Date

https://www.osha.gov/dep/enforcement/hcs_guide_052015.html
Enforcement Update

*5/29/15 Temporary relief of June 1 requirements for existing stock (to continue use of 1994 labels)*

* Packaged for shipment means completely ready. Example Jar with 1994 label to boxes that are unlabeled – boxes require new GHS labels*
MEMORANDUM FOR: REGIONAL ADMINISTRATORS
THROUGH: DOROTHY DOUGHERTY
Deputy Assistant Secretary
FROM: THOMAS GALASSI, Director
Directorate of Enforcement Programs (DEP)
SUBJECT: Interim Enforcement Guidance for Hazard Communication 2012 (HCS 2012) June 1, 2015 Effective Date

This memorandum is to provide additional, interim guidance on the Hazard Communication 2012 June 1, 2015 effective date. OSHA provided related guidance in its February 9, 2015 memorandum which described the Agency’s enforcement position for manufacturers, importers, and distributors that have not received classification and SDS information from upstream supplier(s) on which it intends to rely for classification of its product before June 1, 2015. The February 9th memo explained that in this situation, enforcement discretion would allow for limited continued use of HCS 1994-compliant MSDSs and labels provided that the manufacturer or importer exercised reasonable diligence and made good faith efforts to comply with HCS 2012 prior to June 1st. Since issuing the guidance on February 9, 2015, OSHA has received an overwhelming number of additional questions and requests for further clarification on behalf of manufacturers, importers, and distributors. Many of the questions relate to the use of HCS 1994-compliant labels on containers packaged for shipment (i.e., existing stock.)

The Agency’s efforts to ensure that additional clarification is incorporated in the revised Hazard Communication directive has led to a minor delay in completing review and clearance of the directive. The directive is now anticipated to be approved for issuance shortly after June 1, 2015, and this memorandum will be cancelled upon its issuance. The following interim policy is being provided on the limited continued use of HCS 1994-compliant labels:

• Guidance for manufacturers and importers of hazardous chemicals

Where a manufacturer or importer has not received classification information from its upstream supplier(s) on which it intends to rely for the classification of its product before June 1, 2015, the manufacturer or importer may continue use of the HCS 1994 label under certain limited circumstances. To do so, the manufacturer or importer must be able to initially demonstrate it has exercised reasonable diligence and made good faith efforts to obtain and integrate the information.

The CSO must review the overall efforts and actions taken to comply. No citation will be issued in cases where the manufacturer or importer provides persuasive documentation to show that it made reasonable efforts to obtain the necessary information from upstream suppliers, and attempted to find hazard information from alternative sources (e.g., chemical registries) to classify the data. In these limited situations, manufacturers and importers must promptly create HCS 2012-compliant labels within six months after they develop the updated SDSs. All containers shipped after the six-month period must be labeled with an HCS 2012-compliant label.

Manufacturers or importers of hazardous chemicals (including businesses that repackages) that have existing stock packaged (e.g., boxed, palletized, shrink-wrapped, etc.) for shipment prior to June 1, 2015, that are HCS 1994-compliant labeled, may continue to ship those containers downstream. In such instances, there is no requirement to re-label packaged for shipment containers with HCS 2012-compliant labels. The manufacturer or importer must provide HCS 2012-compliant labels and SDSs for each and every individual container shipped, unless the manufacturer or importer can demonstrate that it exercised reasonable diligence and good faith as discussed in this policy.
Reasonable Diligence Documentation

1. Prove/document attempt to obtain SDS from upstream suppliers. Written account of dialogue with dated copies.

2. Searched from alternative sources

3. Classified data themselves

For manufacturers written dialog of distribution/action plan in writing
Enforcement

• Let’s Test your Knowledge
GHS Resource Packet

- Pictograms & Hazards
- NFPA 704 vs. HazCom 2012 Labels
- Sample GHS Label
- SDS- 16 Section Uniform Format
- SDS Minimum Information