



**Occupational Safety  
and Health Administration**



UNITED STATES DEPARTMENT OF LABOR

## GHS Update



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GlobalChem March 2, 2015



## Regulatory Agenda

### **Title:** Update to the Hazard Communication Standard

- Will consider all updates through Revision 6:
  - Aerosols
  - Desensitized Explosives
  - Skin/Eye classification updates
- Long-term action



## Educational Materials and Outreach

- OSHA's HCS safety and Health Topics Page
  - <https://www.osha.gov/dsg/hazcom/index.html>
    - Labeling, Safety data sheet, pictograms, Training, FAQs, Presentations
- Materials in Progress
  - Hazard Classification; Weight of Evidence, Model Training, US/Canada fact sheets



## % Unknown Acute Toxicity

- The unknown acute toxicity statement is only required on the label and the SDS where the chemical mixture is already classified as acutely toxic for one or more ingredients of known toxicity through a particular route of exposure.
- Classifiers can present the unknown acute toxicity information on ingredients either as a single statement or as multiple statements, where routes are differentiated.
  - Differentiating the unknown toxicity statement by route (recommended).
    - 30% of the mixture consist of ingredient(s) of unknown acute oral toxicity
    - 40% of the mixture consists of ingredient(s) of unknown acute dermal toxicity
    - 50 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity
  - Single statement
    - 50 % of the mixture consists of ingredient(s) of unknown acute toxicity
    - ~~120% of the mixture consists of ingredient(s) of unknown acute toxicity~~

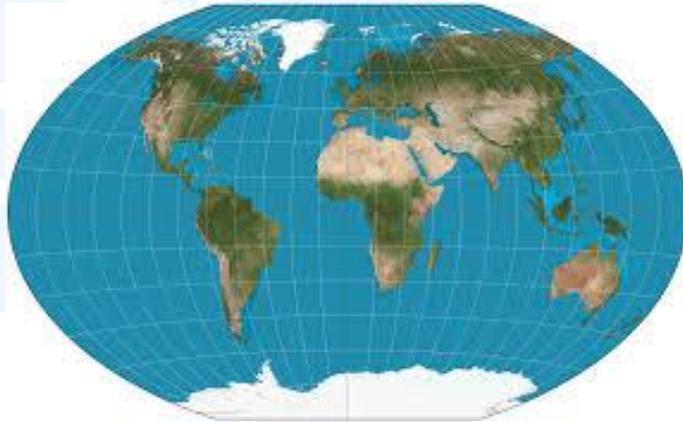


## Import/Export/Bulk Transport

- Interpretations on importing and exporting have not changed
- Imports – When does the duty of labeling begin?
- Exports – What label is required on the inner container?
- Bulk Transport – What are the labeling requirements?



## Domestic/International



## California

- California has updated its Hazard Communication Standard to align with GHS
- The Standard has been submitted to OSHA for our review.
- It is currently under review



## Canada-United States RCC (Phase 1)

- Health Canada and the U.S. Department of Labor established a Memorandum of Understanding (MOU) in 2013, to promote ongoing collaboration on the implementation of GHS updates
  - To make compatible their respective standards-related measures related to the implementation of the GHS and future developments in the GHS to the greatest extent practicable, without reducing the level of safety or of protection to workers recognizing their perspective regulatory processes; and
  - To enhance and strengthen the sharing and exchange of regulatory information between the Participants related to the implementation of the GHS and future developments of the GHS with respect to workplace chemicals in order to reduce systematic barriers between the systems responsible for occupational safety and health of workplace chemicals



## RCC – PHASE II

Health Canada and U.S. OSHA are preparing Regulatory Partnership Statement (RPS) and a Work Plan for Workplace Chemicals:

- **RPS** – Outlines regulatory plans, strategies and governance for how partnership activities will be managed between Health Canada and U.S. OSHA
- **Work Plan** – Presents the partnership activities. These activities may be adjusted based on discussions between the regulatory partners and/or stakeholders



## The Regulatory Partnership Statement SCOPE AND OBJECTIVES

Canada and the U.S. will continue to collaborate on the implementation of GHS and future developments of the GHS through the following objectives:

1. Continue to reduce and prevent Canada-U.S. variances through ongoing collaboration of our guidance materials,
2. Coordinate common positions in advance of United Nations (UN) and other international discussions on the GHS, including supporting harmonized implementation of the GHS globally through the UN Sub-Committee of Experts on the GHS and other international fora, and
3. Align Canada-U.S. positions on future updates and implementation of the GHS (e.g., development and adoption of future revisions of the GHS Purple Book)



## The Transatlantic Trade Investment Partnership (TTIP)

### Chemicals sectors

Pursuing concrete objectives that :

- 1 - shared interest to US and EU
- 2 - cost saving to US and EU industry
- 3 - promote greater regulatory efficiency



## UN Sub-committee



### UN Sub-Committee of Experts on GHS 2013-2014 Biennium

- The 2013/14 Biennium ended in December
- Notable work concluding:
- New physical hazard classes and hazard categories
  - Guidance/Clarifications and corrections
  - Example of labeling of a small packaging



## New Hazard Classes/Categories

- Pyrophoric Gas
  - This will be added as a subcategory to the flammable gas hazard class.
  - Similar in scope as HCS definition
- Desensitized Explosives
  - This is a new hazard class



## Guidance, Clarifications and Corrections

- Comprehensive Guidance for the physical properties in Section 9 of the SDS
  - Three Tables
    - Table 1 – Guidance for the mandatory properties
    - Table 2 – Guidance for physical properties related to classification criteria
    - Table 3 – Additional properties that may be of interest to downstream users
  - Table 1.5.2



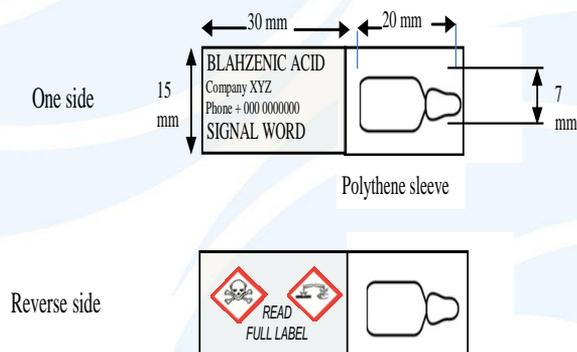
# Guidance, Clarifications and Corrections

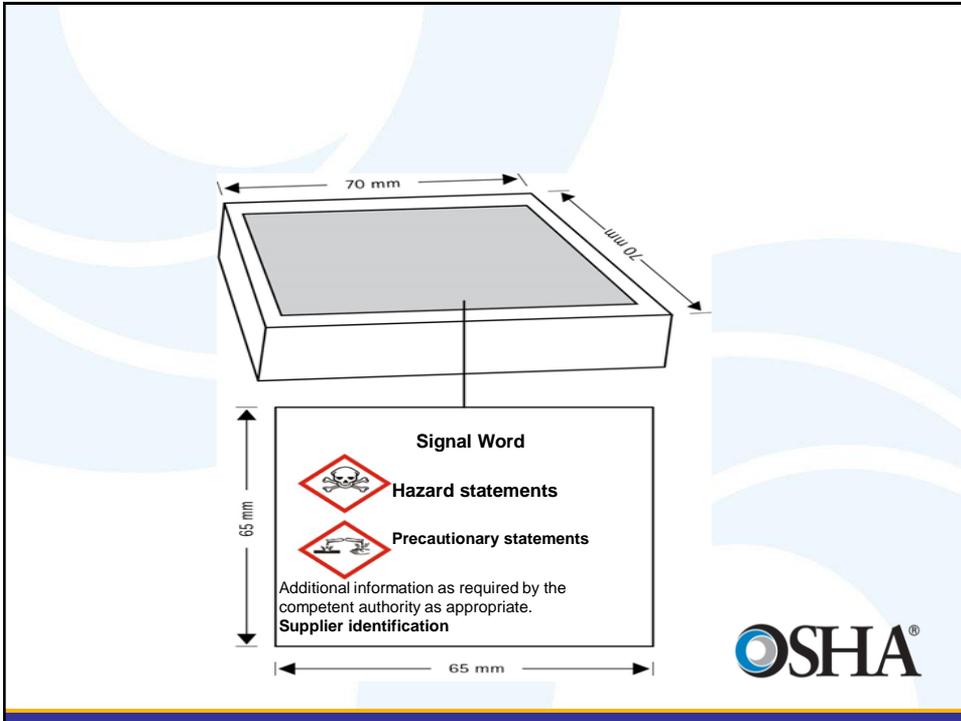
- PCI editorial revisions
- Clarification for labeling in transport
  - 1.4.10.4.4 *Use of GHS pictograms during transport*
- Precautionary statement corrections



## Small Package Example

**Inner packaging:** immediate container with minimum required GHS label elements





## Working group Activities

- Precautionary Statements
- Nanomaterials
- Global List 
- Combustible Dust
- Practical Classification Issues

## Precautionary Statements

- (i) Workstream 1: to develop proposals to rationalize and improve the usability of hazard and precautionary statements. These may include proposals to eliminate redundancies among these statements, and proposals for further guidance and precedence rules for use of the statements;
- (ii) Workstream 2: to consider giving more freedom to labelling practitioners and/or enforcement authorities in assigning precautionary statements and in the precise wording used in precautionary statements, including to consider whether to address minor linguistic variations in hazard and precautionary statements which do not affect the obvious meaning of these statements and, if appropriate, to develop proposals;
- (iii) Workstream 3: to address any other issues relating to Annexes 1-3 and the use of hazard and precautionary statements that the Sub-Committee wishes to refer to the informal correspondence group;



## Nanomaterials

- (a) To establish whether there is a need to amend the GHS to make clear that nano forms of a substance are within scope of the GHS;
- (b) To review the classification and labelling criteria in the GHS to establish whether they are appropriate for nano, as well as bulk-forms of a substance;
- (c) To review the content of safety data sheets set out in the GHS in terms of their applicability to nano-forms of a substance;
- (d) To report back to the Sub-Committee on the outcomes of (a) to (c) and to propose further work, as appropriate.



## Global List

- The expert from the United States of America provided a summary report on the outcome of the meeting of the informal working group which met on 11 December 2014, as follows:
  - (a) The pilot classification work plan set out in Annex I to INF.22 was agreed;
  - (b) Three chemicals were selected for the first round of the classification exercise:
    - (i) Dimethyltin dichloride (CAS No. 753-73-1)
    - (ii) Dicyclopentadiene (CAS No. 77-73-6)
    - (iii) Di-n-butyl phthalate (CAS No. 84-74-2)
  - (c) The timeframe for the classification exercise
  - (d) The proposed program of work for the biennium 2015-2016 outlined in INF.22 (paragraph 10) was agreed.
- The informal working group recalled that the aim of the classification exercise at this stage was to investigate the feasibility of the process and the resources needed to achieve consensus on the application of the classification criteria to the available data.
- The informal working group also discussed how industry participants could participate in discussions at OECD during the pilot exercise. The representative from OECD encouraged them to participate, to the extent possible, on the basis of common positions representing the views of the industrial sectors involved with a common spokesperson. Where there were alternative views, it would be possible for multiple spokespersons to participate.



## Combustible Dust

- Create a definition for dust explosion hazards [“combustible dust”].
- Develop and define the related criteria, including identifying the factors contributing to the hazard.
- Discuss hazard communication, including distinguishing between hazard and risk characteristics, by focusing on 1) combustible dusts in the form as presented, and 2) identifying what happens when substances or mixtures undergo processing.
- Decide if the agreed texts should be in the GHS in the form of a hazard class or in the form of guidance (e.g., an annex).



## Looking ahead

- Work will continue on
  - Combustible Dust; Global List of classifications pilot program; Nanomaterials; Precautionary Statements; Physical hazard test methods; PCI working group; Aspiration hazards
- New work items
  - Review of the explosive chapter for guidance for workplace handling; Labeling of small packages – initiate work on another example; Classification of Flammable gases



### Option 1

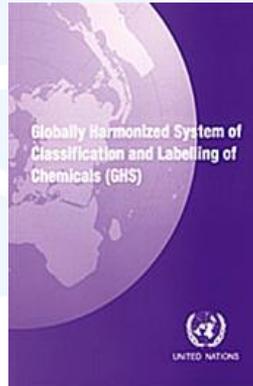
#### Using the LFL and FBV for sub-dividing

Category 1		Category 2
Default: Sub-category 1a	Option: Sub-category 1b	
Gases, which at 20°C and a standard pressure of 101.3 kPa are ignitable when in a mixture of 13% or less by volume in air or UFL-LFL $\geq$ 12 %	Gases from 1a with: 1) LFL > 5 % AND 2) FBV < 10 cm/s	Gases with: LFL > 13 % and UFL – LFL < 12 %
 Extremely flammable gas (H220) Danger	 [Highly] [Flammable gas] [H221]/[Hxxx] [Danger]/[Warning]	 Flammable gas (H221) Warning



Date : 11 March 2014

## UN GHS Links



- United Nations Economic Commission for Europe GHS Subcommittee
- [http://www.unece.org/trans/danger/publi/ghs/ghs\\_welcome\\_e.html](http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html)
- GHS Report from 28<sup>th</sup> Session: <http://www.unece.org/fileadmin/DAM/trans/doc/2014/dgac10c4/ST-SG-AC10-C4-56e.pdf>



## OSHA Information

### **Websites:**

- HazCom 2012 Webpage  
<http://www.osha.gov/dsg/hazcom/index.html>
- Safety & Health Topics Webpage  
<http://www.osha.gov/dsg/hazcom/index2.html>

### **Contact information:**

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# Hazard Communication

The standard that gave workers the right to know, now gives them the right to understand



**Occupational Safety  
and Health Administration**

[www.osha.gov](http://www.osha.gov)  
800-321-OSHA



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