GHS and Its Impact on Retailers and Chemical Suppliers
• HazCom 2012
• New Safety Data Sheet Criteria
• RILA Safety Data Sheet Initiative
• Solutions for OSHA HCS 2012 Management
HazCom 2012: Overview
US – OSHA Finalizes Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

On March 20, 2012, the Occupational Safety and Health Administration’s (OSHA) promulgated its new Hazard Communication Standard (HCS), which adopts the United Nations Globally Harmonized System of Classification and Labeling of Chemicals. (GHS). The final rule was published in the Federal Register on March 26th, 2012. This final rule became effective on May 25, 2012. Safety data sheets must be updated using the new criteria by June 1, 2015.
What is GHS?

- Globally Harmonized System of Classification and Labeling developed by the UN and propelled by an international mandate
- Defines health, physical and environmental hazards
- Establishes classification processes using available data
- Establishes a common hazard communication method
- Explains how to apply the system
- Supplies building blocks for countries to develop their own laws
**Impacted Areas**

<table>
<thead>
<tr>
<th>Hazard Classification</th>
<th>Classify Physical, Health and Environmental standards to new GHS criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labeling</td>
<td>Apply new harmonized signal words, pictograms, and hazard statement for each hazard class and category, along with precautionary statements.</td>
</tr>
<tr>
<td>MSDS to SDS</td>
<td>Mandatory 16-section format with new required data elements and expanded information; sections 12-15 unenforceable under OSHA</td>
</tr>
<tr>
<td>Effective Completion Date</td>
<td>Requirements</td>
</tr>
<tr>
<td>---------------------------</td>
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</tr>
<tr>
<td>December 1, 2013</td>
<td>Train employees on the new label elements and SDS format</td>
</tr>
<tr>
<td>June 1, 2015</td>
<td>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</td>
</tr>
<tr>
<td>December 1, 2015</td>
<td>Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards.</td>
</tr>
<tr>
<td>June 1, 2016</td>
<td>May comply with either 29 CFR 1910 1200 (this final standard), or the current standard, or both</td>
</tr>
<tr>
<td>Transition Period to the effective completion dates noted above</td>
<td></td>
</tr>
</tbody>
</table>
Re-classification of finished goods and additional information provided under HazCom 2012 may have additional impacts.

<table>
<thead>
<tr>
<th>Category</th>
<th>Impact</th>
</tr>
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</table>
| Purchasing                    | • Changes in product classification impacts purchasing decisions  
• GHS-enhanced tools that analyze products and alternatives as well as sustainability, could improve green purchasing strategies                                                                 |
| Workplace Safety              | • Reclassified hazards could have significant workplace safety impacts  
• Spill response programs may need to be evaluated                                                                                                                                       |
| Transportation & Disposal     | • Additional information provided by suppliers may require review by shippers and waste generators who are considering how the new data will affect how a material is classified for transport or disposal                                                                 |
| Regulatory Reporting          | • Hazard re-classification may also impact how chemical hazards are reported to agencies regulatory reporting  
• GHS classification most likely to result in changes to SARA 311/312 status and reporting.                                                                                                 |
| Training & Awareness          | • GHS classification moves compliance from being only performance-based to being more prescriptive  
• Stakeholder awareness and training is necessary to educate employees and other downstream users to understand new information, and impacts.  
• Consumers could also generate questions                                                                                                               |
HazCom 2012: New Label Requirements

HCS 2012 Label
- Product Identifier
- Pictograms
- Signal word
- Precautionary Statements
- Hazardous Statements
- Supplemental Information
- Supplier Identification

OSHA HazCom 2012 exempts some sectors from labeling due to coverage by other federal labeling laws, including Consumer Products.
HazCom 2012: New Pictograms

### Health Hazard
- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

### Flame
- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

### Exclamation Mark
- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

### Gas Cylinder
- Gases Under Pressure

### Corrosion
- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metals

### Exploding Bomb
- Explosives
- Self-Reactives
- Organic Peroxides

### Flame Over Circle
- Oxidizers

### Environment (Non-Mandatory)
- Aquatic Toxicity

### Skull and Crossbones
- Acute Toxicity (fatal or toxic)
Additional Resources

New Safety Data Sheet Criteria
Transitioning MSDS to SDS

- SDS require Section numbers, headings and associated info as defined in Appendix D to §1910.1200

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 (non-mandatory)
13. Disposal considerations (non-mandatory)
14. Transport information (non-mandatory)
15. Regulatory information (Non-mandatory)
16. Other information, including date of preparation or last revision
## Table D.1. Minimum Information for an SDS

<table>
<thead>
<tr>
<th>Heading</th>
<th>Subheading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Identification</strong></td>
<td>(a) Product identifier used on the label;</td>
</tr>
<tr>
<td></td>
<td>(b) Other means of identification;</td>
</tr>
<tr>
<td></td>
<td>(c) Recommended use of the chemical and restrictions on use;</td>
</tr>
<tr>
<td></td>
<td>(d) Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party;</td>
</tr>
<tr>
<td></td>
<td>(e) Emergency phone number.</td>
</tr>
<tr>
<td><strong>2. Hazard(s) identification</strong></td>
<td>(a) Classification of the chemical in accordance with paragraph (d) of §1910.1200;</td>
</tr>
<tr>
<td></td>
<td>(b) Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200. (Hazard symbols may be provided as graphical reproductions in black and white or the name of the symbol, e.g., flame, skull and crossbones);</td>
</tr>
<tr>
<td></td>
<td>(c) Describe any hazards not otherwise classified that have been identified during the classification process;</td>
</tr>
<tr>
<td></td>
<td>(d) Where an ingredient with unknown acute toxicity is used in a mixture at a concentration = 1% and the mixture is not classified based on testing of the mixture as a whole, a statement that X% of the mixture consists of ingredient(s) of unknown acute toxicity is required.</td>
</tr>
<tr>
<td><strong>3. Composition/ information on ingredients</strong></td>
<td>Except as provided for in paragraph (i) of §1910.1200 on trade secrets:</td>
</tr>
<tr>
<td></td>
<td><strong>For Substances</strong></td>
</tr>
<tr>
<td></td>
<td>(a) Chemical name;</td>
</tr>
<tr>
<td></td>
<td>(b) Common name and synonyms;</td>
</tr>
<tr>
<td></td>
<td>(c) CAS number and other unique identifiers;</td>
</tr>
<tr>
<td></td>
<td>(d) Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance.</td>
</tr>
<tr>
<td></td>
<td><strong>For Mixtures</strong></td>
</tr>
<tr>
<td></td>
<td>In addition to the information required for substances:</td>
</tr>
</tbody>
</table>
RILA Safety Data Sheet Initiative
• Different formats from suppliers…hard to read!
• Various levels of completeness and accuracy
• Different interpretations by manufacturers of MSDS content
• DOT transportation and disposal information often not provided
• Retail companies have changing shipping methods (Air, Ground, Water, Rail); suppliers ship by Ground
Suppliers/manufacturers will have to revise SDS to conform to Hazcom 2012 requirements.

Opportunity for the retail industry to upgrade requests for chemical information.

Suppliers appreciate a single request from retailers.

Retailers can request additional information as customers.
SDS Working Group

- Comprised of RILA member retailers and solution providers
Objectives

• Streamline the SDS process required by law under which chemical information is provided by suppliers to retailers

• Consistent retailer requests will enhance supply chain efficiency and communication regarding chemical information

• Assist retailers in properly handling chemical products for the benefit of customers, workers, communities and the environment
Retail SDS Template

- To assist suppliers in determining the information they should provide to retailers
- Aligns with the 16-section format prescribed by OSHA
- Based on finished product with specific product name
- Includes transportation and EPA sections and chemical products not required by OSHA
- Includes a request for specific product name, address and telephone number of the manufacturer, importer or other responsible party for finished products
Target audience for retail SDS template includes retailers, chemical suppliers, manufacturers and SDS authoring software companies.

Up to individual retailers to decide whether to utilize the retail SDS template.

Template has been shared with retailers (RILA member and non-RILA member retailers), chemical suppliers and manufacturers.

No deadline associated with the retail SDS template.

For more information go to www.rila.org.
Compliance Strategies

Actions: “…..And now what, and with what?”

- Retailers should update their Hazcom training material and document workers have completed the training by December 2013
- RILA has a white paper on required changes/updates in hazcom training for Retailers
- Retailer should establish a method to track updated SDS and method to communicate significant changes in hazard classifications, PPE requirements, store use product label changes (pictograms) etc.
- Chemical suppliers need to update MSDS to the SDS format
- Following the RILA guidelines will provide more relevant information to retailers
- Suggest not waiting until the last minute to train or revise SDS
Online Regulatory Reference Tools

- Provides quick access to:
  - GHS Full Text Regulations
  - GHS Status Updates
  - GHS Mixture Classification Rules and Label Generation
  - Other Country-specific Official Classifications (May assist in developing HazCom 2012 Classifications)
    - EU CLP Annex VI (Use Control F to find if a CAS# has a listing)
    - Other Country-specific Non-Official classifications (May assist in developing HazCom 2012 Classifications)
      - EU C&L Inventory database (Accept disclaimer and search by CAS #)
GHS Solutions to Stay Ahead of the Curve

Regulatory Data and Integrated Content
• Provides regulatory data feed into corporate platforms with:
  § GHS Classifications
  § GHS Classification and Labeling Rules
  § GHS Rules and Templates for MSDS Preparation
  § Multi-Lingual GHS Phrases
  § Automatic Assignment of GHS Classifications by Country Adaptations

Data Management Solutions
• Data management solution for SAP EHSM users offers:
  § Access to GHS Classification and Labeling Data

SDS Authoring and Professional Services
• GHS Classifications of Substances and Mixtures
• GHS Compliant MSDS and Label Authoring
GHS Solutions to Stay Ahead of the Curve

SDS Authoring Systems
- Automatic computation of GHS classification for any product based on formulation
- Expert rules automatically assign phrase content in 40+ languages to MSDSs and labels based on GHS classification
- Country specific GHS adaptations for each country/authority adaptation and MSDS and label formats

SDS Distribution
- Distribute GHS formatted MSDSs to Channels, Customers, and Consumers

Vendor MSDS Management System
- Search, Print, View, and Email GHS Compliant Vendor / Raw Material MSDSs

GHS Training
- Offered for companies needing additional assistance learning about and conforming to GHS.
Questions and Answers