



# LEMA LEDGER

Quarterly Newsletter of the Lancaster County Emergency Management Agency

MAY 2012 — "ALWAYS BE READY!"

## GHS

What is it?

How does it affect you?

This *Special Edition* is a general overview of some subtle, yet significant changes to chemical labeling and data sheets.

Local emergency services, business and industry should engage in pre-incident coordination of hazard communication practices.

### IN THIS ISSUE:

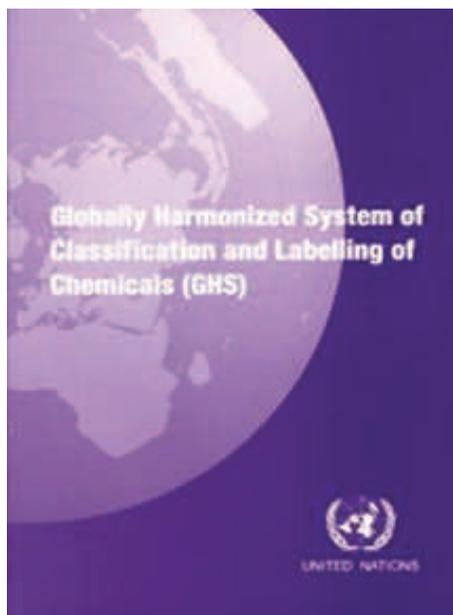
*Label Criteria*  
.....Page 2

*Label Pictographs*  
.....Page 2

*Safety Data Sheets*  
.....Page 3

*Implementation Dates*  
.....Page 4

## SPECIAL EDITION



# Globally Harmonized System

- An Overview -

The Occupational Safety and Health Administration (OSHA) recently adopted new rules (HazCom 2012) on chemical classifications, labeling and safety data sheet components. The new rules become effective May 25, 2012 and represent significant changes for manufacturers, transporters and users of hazardous chemicals in the United States. The new rules are consistent with the Globally Harmonized System (GHS). The GHS was developed in 1992 from the United Nations Conference on Environment and Development (UNCED) to foster universal consistency in product labeling and chemical information. The GHS is not a regulation or standard, but rather an adaptable framework for countries to implement as applicable.

A purpose of the GHS is to prevent issues related to international commerce because hazard communication regulations and standards vary from country to country. In some cases multiple labels and Material Safety Data Sheets are required for the same product and classifying chemical hazards is dependent upon the country of origin. There also can be inconsistencies in employee recognition of warning labels for the same product from different countries.

There is an implementation schedule for the new rules. (see page 4). Outreach efforts of the new OSHA rules have targeted business and industry. Most emergency services are not aware, but must be cognizant of the changes too. In particular, recognition of the new label pictographs and interpretation of the SDS format are necessary. This newsletter reviews some of the GHS elements, but should not replace reviewing the full OSHA ruling or the GHS document. For more information on GHS, visit <http://www.osha.gov/dsg/hazcom/ghs.html>.

# STANDARD LABEL CONTENT

**GHS Signal Words (Danger and Warning) do not replace the pesticide label signal words of Danger, Warning and Caution. EPA has jurisdiction over pesticide labeling.**

**Workplace Labels are under OSHA jurisdiction. Transportation Labels are regulated by the Department of Transportation. There are similarities, but distinct differences as well.**

**The ENVIRONMENT pictograph is not required in the U.S. because OSHA does not have jurisdiction over environmental matters. However, labels on imports from other countries may have the pictograph affixed.**

Workplace labels meeting the GHS criteria are required to include six elements.

1. Product Identification
2. Manufacturer name, address and telephone number.
3. Signal Word. Danger regard severe hazards while Warning is less severe.
4. Applicable Pictograph(s). The appropriate pictograph(s) shall be included. (See below)
5. Hazard Statement. This likely will be short, bullet point style descriptions of

the hazard(s).

6. Pre-cautionary Statement. These statements are based upon four categories including Prevention, Response, Storage and Disposal. A prevention statement example is 'keep aware from children.' A response statement example is 'flush eyes with water for 15 minutes.' A Storage statement example is 'keep out of sunlight.' A disposal statement may refer to a specific local, state or federal regulation. There are no limits to the number of statements. The

manufacturer/distributor should include all applicable hazard and pre-cautionary statements.

The pictographs on workplace labels will be a red bordered diamond with a white background and black pictographs. Pictographs included in a SDS can be a black border diamond.

Many of the pictographs are similar to other markings. However some, like the exclamation point and head/torso profile, are new. Below are the nine GHS pictographs and the hazards they represent.

HCS PICTOGRAMS & 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 &amp; Crossbones</b></p>  <ul style="list-style-type: none"> <li>• Acute Toxicity (fatal or toxic)</li> </ul>

# SAFETY DATA SHEET (SDS)

The SDS headline above is not a typographical error. The classically recognized Material Safety Data Sheet (MSDS) will eventually transition to Safety Data Sheet (SDS). The SDS format is comprised of 16 sections that essentially mirrors the American National Standards Institute (ANSI) format. MSDS' developed in accordance with the OSHA Hazard Communication Standard prior to adoption of the GHS required only 8 specific sections.

The SDS sections will be orderly as follows:

Section 1—Identification

Section 2—Hazard Identification

Section 3—Composition / Ingredient Information

Section 4—First-Aid Measures

Section 5—Fire-fighting Measures

Section 6—Accidental Release Measures

Section 7—Handling and Storage

Section 8—Exposure Control/Personal Protection

Section 9—Physical & Chemical Properties

Section 10—Stability & 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

It is important to note that Sections 12\*-15\* are not required in the HCS 2012 ruling because those elements are not within OSHA's jurisdiction. It is also important to

Glendale Industries		Safety Data Sheet	
Sample		Date Released 11/1/2011	
*** Section 1 – Product and Company Identification ***			
<b>Manufacturer Information</b>		Phone: 312-881-2000	
Glendale Industries 350 N Orleans Chicago, IL 60664		Emergency# 1-888-362-2007	
*** Section 2 – Hazard identification ***			
<b>GHS Classification</b> Oxidizing solids – Category 2		<b>Hazard Statements</b> May intensify fire, oxidizer Toxic if swallowed Fatal in contact with skin Fatal if inhaled	
<b>GHS LABEL ELEMENTS</b> Symbols(s)		<b>Precautionary Statements</b> Prevention Wash thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing Wear eye protection/face protection Do not breathe dust/fume/gas/mist/vapours/ Use only outdoors or in well-ventilated area	
			
<b>Signal Word</b> Danger			

The SDS format is standard among the 67 counties that have adopted GHS elements, now including the United States. SDS graphic from [msdsonline.com](http://msdsonline.com).

note, however, that it is very likely that these sections will be completed considering international commerce and exporting products to countries that require those sections in their import acceptance practices and for workplace use.

SDS' will eventually tie into the Superfund Amendments Re-authorization Act (SARA) requirements under the Right-To-Know laws pertaining to SDS (MSDS) submissions with annual chemical reporting mandates.

Benchmark implementation dates have been published. However, this does not mean that you will not encounter new labels and SDS' beforehand. It is important for emergency service personnel to be aware of the changes now, and train personnel to recognize the new pictographs and not misunderstand SDS versus MSDS. It may take time for boilerplate training programs to reflect the GHS / OSHA elements. Therefore emergency service organization training officers must be proactive in preparing their personnel. Future LEMA Ledger editions will provide updates to the rulings.

## Lancaster County Emergency Management Agency

P O Box 219 \* Manheim PA 17545-0219

Business Phone: 800-808-5236 or 717-664-1200 \* Fax 717-664-1235

### Emergency Management Staff

Randall S. Gockley, Coordinator  
rgockley@lancema.us—717-664-1200

Philip A Colvin, Deputy Director  
pcolvin@lancema.us—717-664-1203

Cheryl Black, Administrative Assistant  
cblack@lancema.us—717-664-1207

Brenda B. Pittman, EMS / CISM Coordinator  
bpittman@lancema.us—717-664-1209

Eric G. Bachman, Hazardous Materials Administrator  
LEMA Ledger Editor  
ebachman@lancema.us—717-664-1204

David Boucher, Operations and Training Coordinator  
dboucher@lancema.us—717-664-1205

*The Lancaster County Emergency Management Agency maintains emergency plans for facilities that use or produce hazardous materials, dam failures, nuclear facilities, and for other types of disasters both man-made or natural.*

*The office also coordinates and directs actions that take place during large scale emergency situations. This coordination is performed at the Emergency Operations Center located within our facility. These activities are done in close cooperation with the County Commissioners, County Administrator, local Emergency Management Agencies (municipalities within the county), and emergency service organizations throughout the county.*

### Lancaster County Board of Commissioners

Scott Martin, Chairman  
Dennis P. Stuckey, Vice-Chairman  
Craig Lehman

# IMPLEMENTATION DATES

## What are they and what do they mean?

**By December 1, 2013— Employers must train employees on how to read SDS/Labels.** This does not mean that labels and SDS' will be transitioned by that date. This is in preparation for the transition to new labeling and SDS criteria.

**June 1, 2015—Manufacturer/Distributor complete chemical reclassification and start producing SDS'/Labels.**

**Through December 1, 2015– Manufacturers/Distributors may ship inventory with old SDS(MSDS) / labels until this date.**

**By June 1, 2016—Full Employer compliance expected.** The transitional period allows for compliance with old and new Hazard Communication Standard.

## DISCLAIMER

The purpose of this newsletter was to advise interested parties in certain changes to the OSHA Hazard Communication Standard. This newsletter does not relieve an employer, training officer or other environmental health and safety administrator from reviewing the entire OSHA / GHS ruling and applying all applicable elements. For more information on the GHS and Hazard Communication Standard, visit <http://www.osha.gov/dsg/hazcom/ghs.html> . Additionally, visit <http://www.osha.gov/dsg/hazcom/side-by-side.html> for a side-by-side comparison of the old and new OSHA Hazard Communication Standard. The Lancaster County Emergency Management Agency and the Local Emergency Planning Committee of Lancaster County do not have any oversight, enforcement or administration over the OSHA HCS. This newsletter was for informational purposes only.