OSHA HAZCOM 2012 (GHS) Training

National Association of Home Builders

NOTICE! This power point outlines employer and employee responsibilities under OSHA's HAZCOM 2012 standard. It is intended to cover **only** the updated 2012 "GHS" additional requirements and **does not** cover the necessary training required by the original OSHA HAZCOM Standard 1910.1200.

NOTICE!

- This this program outlines employer and employee responsibilities under OSHA's HAZCOM 2012 standard.
- This this program covers only the updated 2012 "GHS" additional requirements and ***does not*** cover the necessary training required by the original OSHA HAZCOM Standard 1910.1200.
- This training programs satisfies the December 1, 2013 requirement.

Introduction

- New changes to the Federal Occupational Safety and Health Administration's (OSHA) Hazard Communication **(HAZCOM)** Standard are bringing the United States into alignment with the Globally Harmonized System of Classification and Labeling of Chemicals **(GHS)**.
- **HAZCOM 1994 + Globally Harmonized System (GHS) = HAZCOM 2012**
- Major changes to the HAZCOM Standard:
  - Hazard classification;
  - Container Labels;
  - Safety Data Sheets; and
  - Providing information and training to workers.

What is the Globally harmonized System (GHS)?

- GHS stands for the "Globally Harmonized System" of classification and labeling of chemicals.
- GHS is a system that defines and classifies the hazards of chemical products, and communicates health and safety information on labels and Safety Data Sheets.
- The target audiences for GHS include workers, transport workers, emergency responders, and residential constructors.
- The goal of GHS is to harmonize the set of rules for classifying hazards, the format for chemical labeling, and the format of safety data sheets (SDS).

Why is it necessary?

- Under the GHS all material safety data sheets (MSDS), will now be called safety data sheets (SDS).
- Currently, many different companies have different systems for the classification and labeling of hazardous chemicals that are used in the workplace.
- These differences may cause confusion among employees when looking to the SDS for chemical information because not all current SDS and chemical labels look the same.
- Under the GHS all SDS's will look the same and workers will have the right to understand the dangers of chemicals they work with.

How will GHS affect my company?

Safety Data Sheets	• The new SDS will be in a standardized 16 section format and provide additional information including ecological, disposal, transport, and regulatory information. • One of the key challenges will be working with your vendors to update your SDS inventory in a timely manner.
Container Labeling	• The GHS standard will become a requirement and replace current labeling systems. • The employer must ensure all containers are labeled properly. This includes GHS labels for original containers received from vendors and secondary containers.
Training	• Employees will need to be trained on label, SDS changes, updated product classifications, pictograms, signal words, and precautionary statements. • Written programs will also need updated to include changes to labeling, SDS communication and employee training. • OSHA has stated that employers will be required to train employees within 2 years of the publication of the final rule. • Training employees and updating the written program will require significant resources and should occur as soon as your organization begins its GHS transition.

How will GHS change the HAZCOM standard?

- Overall, the current roles and responsibilities for suppliers, employers and workers likely will not change in the 29 CFR 1910.1200 HAZCOM standards after GHS implementation.
- **All** residential contractors with hazardous chemicals (paints, solvents, etc.) on their jobsites are required to comply with OSHA's HAZCOM rule.

Employer Responsibilities

- Employers must continue to:
  - Educate and train workers on the hazards and safe use of products.
  - Ensure that hazardous materials are properly labeled.
  - Prepare workplace labels and SDSs as necessary.
  - Provide access for workers to up-to-date SDSs.
  - Ensure appropriate control measures are in place to protect the health and safety of workers.

Employee Responsibilities

- Employees will still:
  - Participate in HAZCOM and chemical safety training programs.
  - Take necessary steps to protect themselves and their coworkers.
  - Participate in identifying and controlling hazards.

What is the target date for implementation of GHS?

Effective Completion Date	Requirement(s)	Who Must perform Requirements
December 1, 2013	Train employees on the new label elements, pictograms, 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

What are some key terms in the GHS Vocabulary?

- **SDS** - Safety Data Sheet. SDS is the term used by GHS for Material Safety Data Sheet (MSDS).
- **Hazard group** - While not given a formal definition, GHS divides hazards into three major groups - health, physical, and environmental.
- **Class** - Class is the term used to describe the different hazards. For example, "Gases under Pressure" is an example of a class in the physical hazards group.
- **Category** - Category is the name used to describe the sub-sections of classes. For example, Self-Reactive Chemicals have 7 categories. Each category has rules or criteria to determine what chemicals are assigned to that category.

What are some key terms in the GHS Vocabulary?

- **Hazard Statement** - For each category of hazard class, a standardized statement is used to describe the hazard. For example, the hazard statement for chemicals which meet the criteria for the class Self-heating substances and mixtures, Category 1 is "Self-Heating - May Catch Fire". This hazard statement would appear both on the label and on the SDS.
- **Signal word** - There are two signal words in the GHS system
  - "Warning" – Less Serious
  - "Danger" – **More** Serious
- **Pictogram** - Pictogram refers to the GHS symbol on the material label and SDS. Not all categories have a symbol associated with them.

Hazard Classification

1) Classification (health hazards)

- acute toxicity
- skin corrosion/irritation
- serious eye damage/eye irritation
- respiratory or skin sensitization
- germ cell mutagenicity
- carcinogenicity
- reproductive toxicity
- specific target organ toxicity - single exposure
- specific target organ toxicity - repeated exposure
- aspiration hazard

Hazard Classification

2) Classification (Physical hazards)

- explosives
- flammable gases
- aerosols
- oxidizing gases
- gases under pressure
- flammable liquids
- flammable solids
- oxidizing liquids
- oxidizing solids
- corrosive to metals

Label Elements

- **Product Name or Identifier:** Provide a unique means by which the product user can identify the chemical substance or mixture.
- **Pictogram(s):** A symbol inside a diamond with a red border, denoting a particular hazard class (e.g., acute toxicity/lethality, skin irritation/corrosion, etc.). (*See Appendix X*)
- **Signal word:** One word used to indicate the relative severity of hazard and alert the reader to a potential hazard on the label and safety data sheet. The GHS includes two signal words:
  - **"Warning"** for less severe hazard
  - **"Danger"** for ***more*** severe hazard

Label Elements

- **Hazard Statement(s):** Phrase assigned to each hazard category that describes the nature of the hazard. Examples of hazard statements are: “Harmful If Swallowed,” “Highly Flammable Liquid and Vapor” and “Harmful to Aquatic Life.”
- **Supplemental Information:** This information is meant to be additional / supplemental to the Hazard Statement Section when necessary.

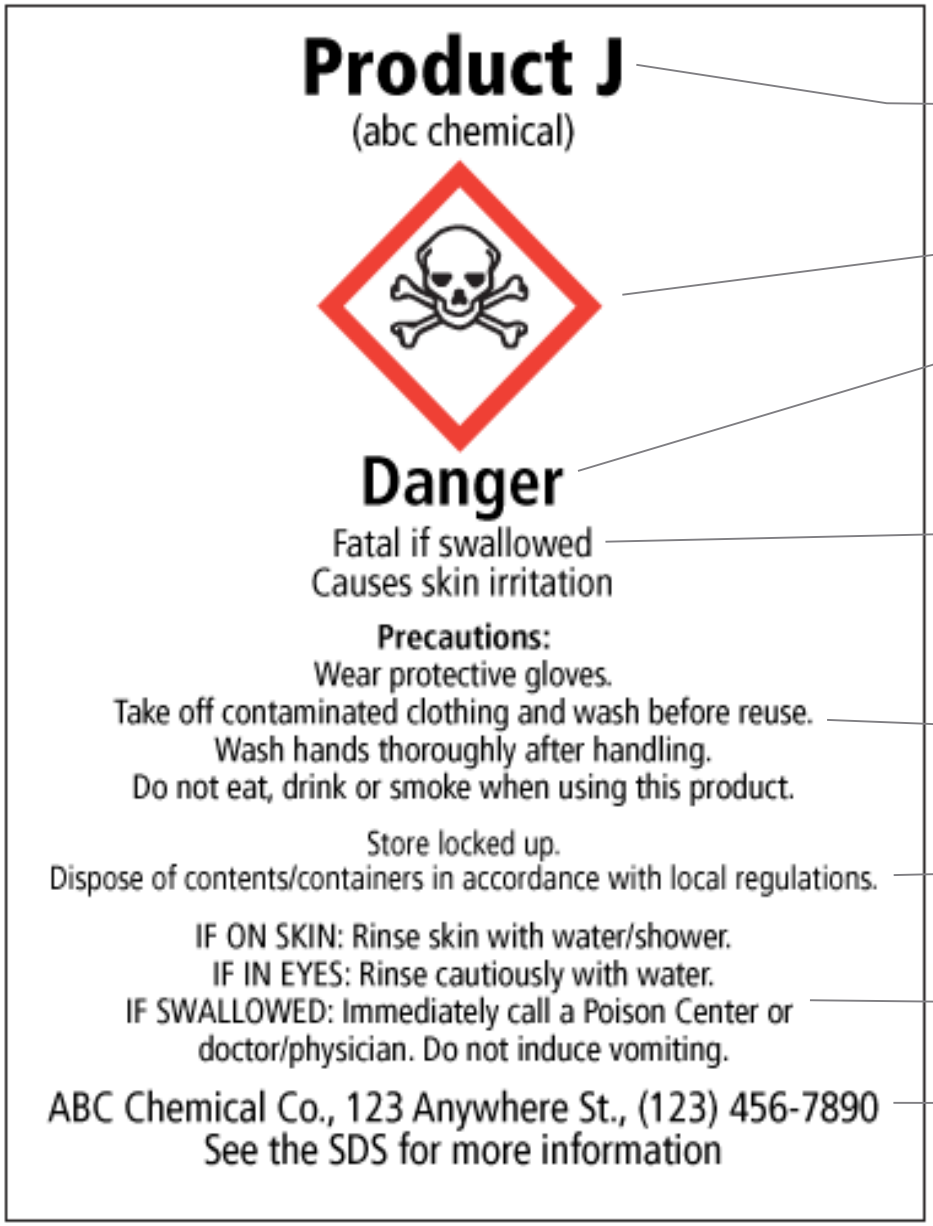
Label Elements

- **Precautionary Measures and Pictograms:** Phrases that describe recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous product, or aid in preventing improper storage or handling of a hazardous product. These phrases cover prevention, response, storage, and disposal of products.
- **First Aid Statement:** Description of necessary measures, subdivided according to the different routes of exposure (i.e. inhalation, skin and eye contact, and ingestion). Includes the most important acute and delayed symptoms/effects along with indication of immediate medical attention and special treatment needed.

Label Elements

- **Supplier identification:** Under the GHS supplier identification would include the name, address and telephone number of the manufacturer or supplier of the substance. Current EPA requirements for product identifiers are generally consistent with GHS.

Sample GHS Label



- Product Name or Identifier
- Pictogram
- Signal Word
- Hazard Statements
- Precautionary Measures & Pictograms
- Supplemental Information
- First Aid Statements
- Supplier Identification

Sample GHS Label

Single packaging using 3 adjacent panels to convey multiple hazards.

Product classified as: (a) Category 2 Flammable liquid; (b) Category Acute 4 (by inhalation); and (c) Category 2 Specific target organ toxicant following repeated exposure.

CODE

PRODUCT NAME

Danger

Keep out of the reach of children.
Read label before use.

COMPANY NAME

Street Address
City, State, Postal Code, Country
Phone Number
Emergency Phone Number

DIRECTIONS FOR USE:
XXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXX

Highly flammable liquid and vapour.
Harmful if inhaled.
May cause liver and kidney damage through prolonged or repeated exposure.

Keep container tightly closed.
Keep away from heat/sparks/open flame. -No smoking.
Use only outdoors or in a well-ventilated area.
Do not breath fume/gas/mist/vapours/spray.
Wear protective gloves and eye/face protection [as specified....]
Ground/bond container and receiving equipment.

IN CASE OF FIRE use [as specified] for extinction

FIRST AID
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.

Store in a cool, well-ventilated place.

Fill weight:	**XXXX**	**Lot Number:**	**XXXX**
Gross weight:	**XXXX**	**Fill Date:**	**XXXX**
Expiration Date:	**XXXX**		

National Association of Home Builders

Product Name or Identifier

Pictogram

Signal Word

Hazard Statements

Precautionary Measures & Pictograms

First Aid Statements

Supplemental Information

Supplier Identification

NAHB

Pictograms

What type of hazard does this pictogram represent?

Pictograms

Health Hazard

- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Pictograms

What type of hazard does this pictogram represent?

Pictograms

Flame

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gasses
- Self-Reactive
- Organic Peroxides

Pictograms

What type of hazard does this pictogram represent?

Pictograms

Exclamation Mark

- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity (harmful)
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to ozone Layer

Pictograms

What type of hazard does this pictogram represent?

Pictograms

Gas Cylinder

- Gasses Under Pressure

Pictograms

What type of hazard does this pictogram represent?

Pictograms

Corrosion

- Skin Corrosion/Burns
- Eye Damage
- Corrosive to metals

Pictograms

What type of hazard does this pictogram represent?

Pictograms

Exploding Bomb

- Explosives
- Self-Reactive
- Organic peroxides

Pictograms

What type of hazard does this pictogram represent?

Pictograms

Flame Over Circle

- Oxidizers

Pictograms

What type of hazard does this pictogram represent?

Pictograms

Skull and Crossbones

- Acute Toxicity (fatal or toxic)

Pictograms

What type of hazard does this pictogram represent?

Pictograms

Environment

- Aquatic Toxicity

Safety Data Sheets (SDS)

- **The old MSDS (Material Safety Data Sheets) will now be called SDS (Safety Data Sheets).**
- The new GHS Safety Data Sheet (SDS) has 16 sections in a set order, and regulated information requirements as shown below.
- The SDS updating requirement, requiring the employer to update SDS inventory every three (3) years is will be in effect with the GHS.
- All old MSDS inventories will need to be updated to current SDS.

Safety Data Sheet (SDS) Sections 1-16

1) Identification of the substance or mixture and of the supplier	9) Physical and chemical properties
2) Hazards identification	10) Stability and reactivity
3) Composition/information on ingredients	11) Toxicological information
4) First aid measures	12) Ecological information
5) Firefighting measures	13) Disposal considerations
6) Accidental release measures	14) Transport information
7) Handling and storage	15) Regulatory information
8) Exposure controls/personal protection	16) Other information including information on preparation and revision of the SDS

Additional Resources

OSHA HAZCOM Standard
http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10099

OSHA HAZCOM website
http://www.osha.gov/dsg/hazcom/index2.html

OSHA Guide to GHS
http://www.osha.gov/dsg/hazcom/ghs.html

Questions?

Sign In Sheet – HAZCOM 2012 Training (Dec 1, 2013 req.)

Company Name: _____ Trainer name: _____

Name : Date : Name: Date: