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**Continuing Education  
Material:**

**REVISED OSHA  
HAZARD COMMUNICATION  
STANDARD**

**ABP, Inc.**

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# ABP CONTINUING EDUCATION MATERIAL

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## REVISED OSHA HAZARD COMMUNICATION STANDARD

### OBJECTIVES

1. List major changes to the Hazard Communication Standard.
2. List compliance requirements and compliance dates.
3. Explain new labeling requirements.

### TABLE OF CONTENTS

	PAGE
Benefits of the revised Hazard Communication Standard	2
Major changes to the HazCom Standard	2
Requirements and Timetable for Compliance	3
Labeling Requirements	3
New Safety Data Sheets	6
Reference - <a href="http://www.osha.gov/dsg/hazcom/index.html">www.osha.gov/dsg/hazcom/index.html</a>	

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## REVISED OSHA HAZCOM STANDARD (HCS)

([www.osha.gov/dsg/hazcom/index.html](http://www.osha.gov/dsg/hazcom/index.html))

OSHA revised its Hazard Communication Standard (HCS - 29 CFR 1910.1200) in order to bring the U.S. in alignment with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). In 1983 the HCS gave employees the “right to know” about any chemical hazards in the workplace, and the new GHS gives employees the “right to understand” about the chemical hazards. As a result of the changes, workers will have better information available on the safe handling and use of hazardous chemicals. The modifications are expected to prevent over 500 workplace injuries and illnesses and 43 fatalities annually.

### Major Benefits of the revised Hazard Communication Standard

- 1- Enhance employee comprehension of hazards, especially for low and limited-literacy employees, reduce confusion in the workplace, facilitate safety training, and result in safer handling and use of chemicals;
- 2- Provide employees quicker and more efficient access to information on the safety data sheets;
- 3- Result in cost savings to American businesses of more than \$475 million in productivity improvements, fewer safety data sheet (SDS – formerly call Material Safety Data Sheet (MSDS)) and label updates and simpler new hazard communication training; and
- 4- Reduce trade barriers by harmonizing with systems around the world.

### Major Changes to the Hazard Communication Standard

- ➔ **Hazard Classification:** Chemical manufacturers and importers are required to determine the hazards of the chemicals they produce or import. Hazard classification under the new, updated standard provides specific criteria to address health and physical hazards as well as classification of chemical mixtures.
- ➔ **Labels:** Chemical manufacturers and importers must provide a label that includes A signal work, pictogram, hazard statement, and precautionary statement for each Hazard class and category.
- ➔ **Safety Data Sheets:** The new format requires 16 specific sections, ensuring Consistency in presentation of important protection information.
- ➔ **Information and Training:** To facilitate understanding of the new system, the new standard requires that workers by trained by December 1, 2013 on the new label elements and safety data format, in addition to current training requirements.

### Rulemaking Background:

OSHA published a Notice of Proposed Rulemaking to update the Hazard Communication Standard in September 2009 and held public hearings in March 2010.

### Changes from the Proposed to the Final Rule:

OSHA reviewed the record and revised the Final Rule in Response to the comments submitted.

### Changes from the proposed to the Final Rule

- Maintaining the disclosure of exposure limits (Threshold Limit Values – TLVs) established by the American Conference of Governmental Industrial Hygienists (ACGIH) and carcinogen

status from nationally and internationally recognized lists of carcinogens on the safety data sheets;

- Clarification that borders of pictograms must be red on the label;
- Flexibility regarding the required precautionary and hazard statements to allow label preparers to consolidate and/or eliminate inappropriate or redundant statements; and
- Longer deadlines for full implementation of the standard. (See Chart Below)

### What You Need to Do and When

Effective Completion Date	Requirement(s)	Who
December 1, 2013	Train employees on the new label elements and 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 has 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

Employees need to be trained early during the transition process because the new labels and SDSs are already being seen in the workplace.

### Training Required by December 1, 2013










- Training on label elements must include information on:

1. Type of information the employee would expect to see on the new labels, to include:
  - ➔ Product Identifier – How hazardous the chemical is must be identified. This can be the chemical name, code number or batch number. The same product identifier must be on the label and in Section 1 of the SDS.
  - ➔ Signal Word – This is used to indicate the severity of the hazard. There are only two signal words that can be used, “Danger” and “Warning”. “Danger” is used for the more severe hazards and “Warning” is used for the less severe hazards. There can only be ONE signal word on the label so if two apply the more severe word should be chosen.

→ Pictogram - OSHA's eight required pictograms must be in the shape of a square set at a point and include a black hazard symbol on a white background with a red frame sufficiently wide enough to be clearly visible.

The GHS uses a total of nine pictograms. OSHA will only enforce the use of eight. The "environmental" pictogram is not mandatory but may be used to provide additional information.

### PICTOGRAMS AND HAZARDS

<p style="text-align: center;"><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 style="text-align: center;"><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 style="text-align: center;"><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 style="text-align: center;"><b>Gas Cylinder</b></p>  <ul style="list-style-type: none"> <li>• Gases Under Pressure</li> </ul>	<p style="text-align: center;"><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 style="text-align: center;"><b>Exploding Bomb</b></p>  <ul style="list-style-type: none"> <li>• Explosives</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>
<p style="text-align: center;"><b>Flame Over Circle</b></p>  <ul style="list-style-type: none"> <li>• Oxidizers</li> </ul>	<p style="text-align: center;"><b>Environment (Non-Mandatory)</b></p>  <ul style="list-style-type: none"> <li>• Aquatic Toxicity</li> </ul>	<p style="text-align: center;"><b>Skull and Crossbones</b></p>  <ul style="list-style-type: none"> <li>• Acute Toxicity (fatal or toxic)</li> </ul>

→ Hazard Statement(s) – Describe the nature of the hazard(s) of a chemical, including the degree of the hazard. The hazard statements are specific to the hazard classification categories, and employees should always see the same statement for the same hazards, no matter what the chemical is or who produces it. For example: “Causes damage to kidney through prolonged or repeated exposure when absorbed through the skin.” All applicable hazard statements must appear on the label. Hazard statements may be combined where appropriate to reduce redundancies and improve readability.

→ Precautionary Statement(s) – A phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling. There are four types of precautionary statements:

- (1) prevention – to minimize exposure
- (2) response – in case of accidental spillage or exposure emergency response and first aid
- (3) storage
- (4) disposal

For example, a chemical presenting a specific target organ toxicity (repeated exposure) hazard would include the following on the label: “Do not breathe dust/fume/gas/mist/vapors/spray. Get medical advice/attention if you feel unwell. Dispose of contents/container in accordance with local/regional/national/and international regulations.” A forward (/) designates that the classifier can choose one of the precautionary statement. In the above example, the label could state, “Do not breathe the vapors or spray. Get medical attention if you feel unwell. Dispose of the contents in accordance with local/regional/national/international regulations.” Precautionary statements may be combined on the label to save on space and improve readability. Where a chemical is classified for a number of hazards and the precautionary statements are similar, the most stringent statements must be included on the label. A manufacturer or importer may also eliminate a precautionary statement if it can demonstrate that the statement is inappropriate.

→ Name, address and phone number of the chemical manufacturer, distributor, or importer.

2. How an employee might use the labels in the workplace.  
Explain how information on the label can be used to ensure proper storage of the chemical. Also how information on the label can be used for first aid emergencies.
3. General understanding of how the elements work together on a label.  
Explain how pictograms and hazard class work together to provide information to employees and will always indicate the most protective information on the label.
4. Training on the format of the Safety Data Sheet (SDS) must include a review of the 16 required sections.
5. How the information on the label is related to the SDS.

## **SUPPLEMENTARY INFORMATION**

The label producer may provide additional information that it deems helpful. It may also list any hazards not otherwise classified under this portion of the label. This section must also identify the percentage of ingredient(s) of unknown acute toxicity when it is present in a concentration of greater than/equal to 1%. There is also no required format for how a workplace label must look and no particular format that an employer must use; however, it cannot contradict or detract from the required information. The pictograms that OSHA has adopted improve worker safety and health, conform to the GHS and are used worldwide. It is important to note that the OSHA pictograms do not replace the diamond-shaped labels that the U.S. Department of Transportation (DOT) requires for the transport of chemicals, including chemical drums, chemical totes, tanks or other containers.

**NOTE:** All hazardous chemicals shipped after June 1, 2015 must be labeled with specified elements including pictograms, signal words and hazard and precautionary statements. Manufacturers, importers, and distributors may start using the new labeling system in the revised HCS before the June 1, 2015 effective date if they choose. Until the June 1, 2015 effective date, manufacturers, importers and distributors may maintain compliance with the requirements of HazCom 1994 or the revised standard. Distributors may continue to ship containers labeled by manufacturers or importers in compliance with the HazCom 1994 until December 1, 2015.

### **EMPLOYER RESPONSIBILITIES**

Employers are responsible for maintaining the labels on the containers, including, but not limited to, tanks totes and drums. The labels must be maintained on chemicals in a manner which continues to be legible and the pertinent information does not get deface or removed in any way.

### **NEW SAFETY DATA SHEETS (SDS – FORMERLY MATERIAL SAFETY DATA SHEETS)**

The Hazard Communication Standard requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets to communicate the hazards of hazardous chemical products. For each chemical the SDS includes the physical, health, and environmental health hazards, properties of each chemical, protective measures and safety precautions for handling, storing, and transporting the chemical. Sections 1 through 8 contain general information; sections 9 through 11 and 16 contain other technical and scientific information such as physical and chemical properties, etc. Sections 12 through 15 will not be enforced by OSHA but they must be included to be consistent with the UN Globally harmonized System of Classification and Labeling of Chemicals.

As of June 1, 2015, the HCS will require new SDSs to be in a uniform format and include the following sixteen sections. Employers must ensure that the SDSs are readily accessible to all employees at all times.

#### **Section 1: Identification**

This section identifies the chemical on the SDS as well as the recommended uses. It includes product identifier; manufacturer or distributor name, address, phone number, emergency phone number and recommended use and restrictions on use.

## Section 2: Hazard(s) Identification

This section identifies the hazards of the chemical present on the SDS and the appropriate warning information.

## Section 3: Composition/Information on Ingredients

This section identifies the ingredients(s) contained in the product indicated on the SDS, including impurities and stabilizing additives.

## Section 4: First Aid Measures

This section describes the initial care that should be given by untrained responders to an individual who has been exposed to the chemical.

## Section 5: Fire-Fighting Measures

This section provides recommendations for fighting a fire caused by the chemical.

## Section 6: Accidental Release Measures

This section provides recommendations on the appropriate response to spills, leaks, or releases, including containment and cleanup practices to prevent or minimize exposure to people, properties, or the environment. It may also include recommendations distinguishing between responses for large and small spills where the spill volume has a significant impact on the hazard.

## Section 7: Handling and Storage

This section provides guidance on the safe handling practices and conditions for safe storage of chemicals.

## Section 8: Exposure Controls/Personal Protection

This section lists OSHA's Permissible Exposure Limits (PELS); Threshold Limit (TLVs); appropriate engineering controls; personal protective equipment (PPE).

## Section 9: Physical and Chemical Properties

This section identifies the characteristics of the chemical such as appearance, odor, viscosity, etc.

## Section 10: Stability and Reactivity

This section describes the reactivity hazards of the chemical and the chemical stability information. This section is broken into three parts: reactivity, chemical stability and other.

## Section 11: Toxicological Information

This section identifies health effects information including routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

## Section 12: Ecological Information (non-mandatory)

This section provides information to evaluate the environmental impact of the chemical (s) if it were released to the environment.

## Section 13: Disposal Considerations (non-mandatory)

This section provides guidance on proper disposal practices, recycling or reclamation of the chemical(s) or its container, and safe handling practices.

## Section 14: Transport Information (non-mandatory)

This section provides guidance on classification information for shipping and transporting of hazardous chemical(s)

## Section 15: Regulatory Information (non-mandatory)

This section identifies the safety, health, and environmental regulations specific for that product that is not indicated anywhere else on the SDS.

## Section 16: Other Information

This section indicates when the SDS was prepared or when the last known revision was made and/or where the changes have been made.



## **OSHA HAZCOM STANDARD – Self-Assessment Quiz**

Please place all answers on the Continuing Education Registration form.  
Mail form to ABP, Inc. to be graded so that you can get your P.A.C.E. certificate.

1. What three (3) items are required to appear on chemical labels?
  1. Specific hazard and precautionary statements.
  2. Signal word.
  3. Appropriate PPE to wear.
  4. Pictogram

a. 1, 2, and 3      b. 2, 3, and 4      c. 1, 3, and 4      d. 1, 2, and 4
2. The two (2) signal words are “danger” and?
  - a. trouble              b. watch              c. warning              d. caution
3. OSHA revised the HCS to become in alignment with the ?
  - a. CMS                  b. GMC                  c. GHS                  d. CDC
4. All employees are required to be trained on new label requirements by:
  - a. 12/01/13              b. 6/01/15              c. 12/01/15              d. 6/01/16
5. The eight (8) OSHA required pictograms must be in the shape of a square set at a point with a black symbol on a white background framed in what color?
  - a. black                  b. blue                  c. red                  d. green
6. Which pictogram is NOT mandatory by OSHA?
  - a. flame                  b. gas cylinder              c. environment              d. corrosion
7. A picture of a skull & crossbones means:
  - a. explosives              b. acute toxicity              c. skin corrosion              d. carcinogen
8. Which of the following is NOT a type of precautionary statement?
  - a. prevention              b. reporting              c. response              d. disposal
9. Material Safety Data Sheets are now called?
  - a. MSS                  b. MDS                  c. SDS                  d. DSS
10. Which of the 16 sections on the new Safety Data Sheets will NOT be enforced by OSHA?
  - a. 1 - 8                  b. 9 – 11                  c. 11 – 16                  d. 12 - 15