New changes to the Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard are bringing the United States into alignment with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), further improving safety and health protections for America's workers. Building on the success of OSHA's current Hazard Communication Standard, the GHS is expected to prevent injuries and illnesses, save lives and improve trade conditions for chemical manufacturers. The Hazard Communication Standard in 1983 gave the workers the 'right to know,' but the new Globally Harmonized System gives workers the 'right to understand.'

The new hazard communication standard still requires chemical manufacturers and importers to evaluate the chemicals they produce or import and provide hazard information to employers and workers by putting labels on containers and preparing safety data sheets. However, the old standard allowed chemical manufacturers and importers to convey hazard information on labels and material safety data sheets in whatever format they chose. The modified standard provides a single set of harmonized criteria for classifying chemicals according to their health and physical hazards and specifies hazard communication elements for labeling and safety data sheets.

Benefits: The new standard covers over 43 million workers who produce or handle hazardous chemicals in more than five million workplaces across the country. The modification is expected to prevent over 500 workplace injuries and illnesses and 43 fatalities annually. Once fully implemented it will also:

- Enhance worker comprehension of hazards, especially for low and limited-literacy workers, reduce confusion in the workplace, facilitate safety training, and result in safer handling and use of chemicals;
- Provide workers quicker and more efficient access to information on the safety data sheets;
- Result in cost savings to American businesses of more than $475 million in productivity improvements, fewer safety data sheet and label updates and simpler new hazard communication training; and
- 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 word, 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 be trained by December 1, 2013 on the new label elements and safety data sheet format, in addition to the current training requirements.

Changes from the Proposed to the Final Rule: OSHA reviewed the record and revised the Final Rule in response to the comments submitted. Major changes include:

- 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 the 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 the chart below).

What you need to do and when:

- **Chemical users:** Continue to update safety data sheets when new ones become available, provide training on the new label elements and update hazard communication programs if new hazards are identified.
- **Chemical Producers:** Review hazard information for all chemicals produced or imported, classify chemicals according to the new classification criteria, and update labels and safety data sheets.

<table>
<thead>
<tr>
<th>Effective Completion Date</th>
<th>Requirement(s)</th>
<th>Who</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 1, 2013</td>
<td>Train employees on the new label elements and SDS format.</td>
<td>Employers</td>
</tr>
</tbody>
</table>
### Other U.S. Agencies:
The Department of Transportation (DOT), Environmental Protection Agency, and the Consumer Product Safety Commission actively participated in developing the GHS. DOT has already modified its requirements for classification and labeling to make them consistent with United Nations transport requirements and the new globally harmonized system.

### Global implementation:
The new system is being implemented throughout the world by countries including Canada, the European Union, China, Australia, and Japan.

### Additional information:
More information on the hazard communication standard, including the link to the Federal Register notice, can be found on OSHA's hazard communication safety and health topics page at [www.osha.gov/dsg/hazcom/index.html](http://www.osha.gov/dsg/hazcom/index.html).

A part of the U.S. Department of Labor, OSHA has been preventing injuries and illnesses and saving lives since 1971. For more information go to [www.osha.gov](http://www.osha.gov).

<table>
<thead>
<tr>
<th>Date</th>
<th>Requirement</th>
<th>Responsible Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 1, 2015*</td>
<td>Comply with all modified provisions of this final rule, except:</td>
<td>Chemical manufacturers, importers, distributors and employers</td>
</tr>
<tr>
<td>December 1, 2015</td>
<td>Distributors may ship products labeled by manufacturers under the old system until December 1, 2015.</td>
<td>Employers</td>
</tr>
<tr>
<td>June 1, 2016</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>
<td>All chemical manufacturers, importers, distributors and employers</td>
</tr>
<tr>
<td>Transition Period</td>
<td>Comply with either 29 CFR 1910.1200 (this final standard), or the current standard, or both.</td>
<td>Employers</td>
</tr>
</tbody>
</table>

* This date coincides with the European Union implementation date for classification of mixtures.
**Product Identifier**

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Supplier Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hazard Statements**

- Highly flammable liquid and vapor. May cause liver and kidney damage.
- Keep container tightly closed. Store in a cool, well-ventilated place that is locked. Keep away from heat/sparks/open flame. No smoking.
- Only use non-sparking tools.
- Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Ground and bond container and receiving equipment. Do not breathe vapors.
- Wear protective gloves.
- Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Dispose of in accordance with local, regional, national, international regulations as specified.

**Emergency Phone Number**

**Company Name**

_______________________

**Address**

Street Address: ____________________________

City: ____________________________

State: _______

Postal Code: ________________

Country: _______

**In Case of Fire:**

Use dry chemical (BC) or Carbon Dioxide (CO2) fire extinguisher to extinguish.

**First Aid**

If exposed call Poison Center.

If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.

**Fill Weight:** ___________

**Lot Number:** ___________

**Gross Weight:** ___________

**Fill Date:** ___________

**Expiration Date:** ___________

**Danger**

Highly flammable liquid and vapor.

**Signal Word**

- Danger

**OSHA** has updated the requirements for labeling of hazardous chemicals under its Hazard Communication Standard (HCS). As of June 1, 2015, all labels will be required to have pictograms, a signal word, hazard and precautionary statements, the product identifier, and supplier identification. A sample revised HCS label, identifying the required label elements, is shown on the right. Supplemental information can also be provided as needed.

For more information:

- Hazard Communication Standard Labels: (800) 321-OSHA (6742)
- www.osha.gov

- OSHA 3492-02 2012 QUICK CARD TM
Peligro

Líquidos y vapores muy inflamables. Puede provocar daños al hígado y a los riñones.

Mantener el contenedor herméticamente cerrado. Guardar en un lugar fresco, bien ventilado y cerrado bajo llave. Mantener alejado de fuentes de calor, chispas o llama... el producto según las especificaciones y los reglamentos locales, regionales, nacionales e internacionales.

En caso de incendio: usar un extintor de polvo químico (tipo BC) o de bióxido de carbono (CO²).

Primeros auxilios

Si hay exposición a este producto, llamar al Centro de Control de Intoxicaciones. En caso de contacto con la piel o el cabello: quitarse de inmediato toda la ropa contaminada. Lavarse la piel con agua.

Información suplementaria

De acuerdo con su norma de comunicación de peligros (HCS, por sus siglas en inglés), la OSHA ha actualizado los requisitos para las etiquetas de los productos químicos peligrosos. A partir del 1.° de junio de 2015, se exigirá que todas las etiquetas incluyan pictogramas, una palabra de advertencia, indicaciones de peligro, consejos de prudencia, identificación del producto y la identificación del proveedor. A la derecha se presenta la muestra de una etiqueta modificada de acuerdo con la HCS, que incluye los elementos obligatorios. La etiqueta puede contener también información suplementaria según sea necesario.

Para más información:

Etiquetas para la norma sobre la comunicación de peligros
(800) 321-OSHA (6742)
www.osha.gov
As of June 1, 2015, the Hazard Communication Standard (HCS) will require pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.

**HCS Pictograms and Hazards**

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flame</th>
<th>Exclamation Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Carcinogen</td>
<td>• Flammables</td>
<td>• Irritant (skin and eye)</td>
</tr>
<tr>
<td>• Mutagenicity</td>
<td>• Pyrophorics</td>
<td>• Skin Sensitizer</td>
</tr>
<tr>
<td>• Reproductive Toxicity</td>
<td>• Self-Heating</td>
<td>• Acute Toxicity (harmful)</td>
</tr>
<tr>
<td>• Respiratory Sensitizer</td>
<td>• Emits Flammable Gas</td>
<td>• Narcotic Effects</td>
</tr>
<tr>
<td>• Target Organ Toxicity</td>
<td>• Self-Reactives</td>
<td>• Respiratory Tract Irritant</td>
</tr>
<tr>
<td>• Aspiration Toxicity</td>
<td>• Organic Peroxides</td>
<td>• Hazardous to Ozone Layer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Non-Mandatory)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gas Cylinder</th>
<th>Corrosion</th>
<th>Exploding Bomb</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Gases Under Pressure</td>
<td>• Skin Corrosion/ Burns</td>
<td>• Explosives</td>
</tr>
<tr>
<td></td>
<td>• Eye Damage</td>
<td>• Self-Reactives</td>
</tr>
<tr>
<td></td>
<td>• Corrosive to Metals</td>
<td>• Organic Peroxides</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flame Over Circle</th>
<th>Environment</th>
<th>Skull and Crossbones</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Oxidizers</td>
<td>• Aquatic Toxicity</td>
<td>• Acute Toxicity (fatal or toxic)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more information:

OSHA® Occupational Safety and Health Administration
U.S. Department of Labor
www.osha.gov (800) 321-OSHA (6742)
A partir del 1.° de junio de 2015, la norma de comunicación de peligros (HCS, por sus siglas en inglés) exigirá pictogramas en las etiquetas para advertir a los usuarios de los peligros químicos a los que puedan estar expuestos. Cada pictograma representa un peligro definido y consiste en un símbolo sobre un fondo blanco enmarcado con un borde rojo. La clasificación del peligro químico determina el pictograma que muestra la etiqueta.

### Pictogramas y peligros según la HCS

<table>
<thead>
<tr>
<th>Peligro para la salud</th>
<th>Llama</th>
<th>Signo de exclamación</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Carcinógeno</td>
<td>• Inflamables</td>
<td>• Irritante (piel y ojos)</td>
</tr>
<tr>
<td>• Mutagenicidad</td>
<td>• Pirofóricos</td>
<td>• Sensibilizador cutáneo</td>
</tr>
<tr>
<td>• Toxicidad para la reproducción</td>
<td>• Calentamiento espontáneo</td>
<td>• Toxicidad aguda (daño)</td>
</tr>
<tr>
<td>• Sensibilización respiratoria</td>
<td>• Desprenden gases inflamables</td>
<td>• Efecto narcótico</td>
</tr>
<tr>
<td>• Toxicidad específica de órganos diana</td>
<td>• Reaccionan espontáneamente (autorreactivas)</td>
<td>• Irritante de vías respiratorias</td>
</tr>
<tr>
<td>• Peligro por aspiración</td>
<td>• Peróxidos orgánicos</td>
<td>• Peligros para la capa de ozono (no obligatorio)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Botella de gas</th>
<th>Corrosión</th>
<th>Bomba explotando</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Gases a presión</td>
<td>• Corrosión o quemaduras cutáneas</td>
<td>• Explosivos</td>
</tr>
<tr>
<td></td>
<td>• Lesion ocular</td>
<td>• Reaccionan espontáneamente (autorreactivas)</td>
</tr>
<tr>
<td></td>
<td>• Corroso para los metales</td>
<td>• Peróxidos orgánicos</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Llama sobre círculo</th>
<th>Medio ambiente</th>
<th>Calavera y tibias cruzadas</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Comburentes</td>
<td>• Toxicidad acuática</td>
<td>• Toxicidad aguda (mortal o tóxica)</td>
</tr>
</tbody>
</table>

**Para más información:**

OSHA® Administración de Seguridad y Salud Ocupacional
Departmento de Trabajo de los EE. UU.
www.osha.gov (800) 321-OSHA (6742)
The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products. As of June 1, 2015, the HCS will require new SDSs to be in a uniform format, and include the section numbers, the headings, and associated information under the headings below:

Section 1, Identification includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

Section 2, Hazard(s) identification includes all hazards regarding the chemical; required label elements.

Section 3, Composition/information on ingredients includes information on chemical ingredients; trade secret claims.

Section 4, First-aid measures includes important symptoms/effects, acute, delayed; required treatment.

Section 5, Fire-fighting measures lists suitable extinguishing techniques, equipment; chemical hazards from fire.

Section 6, Accidental release measures lists emergency procedures; protective equipment; proper methods of containment and cleanup.

Section 7, Handling and storage lists precautions for safe handling and storage, including incompatibilities.

(Continued on other side)
Hazard Communication Safety Data Sheets

Section 8, Exposure controls/personal protection lists OSHA’s Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

Section 9, Physical and chemical properties lists the chemical's characteristics.

Section 10, Stability and reactivity lists chemical stability and possibility of hazardous reactions.

Section 11, Toxicological information includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information*
Section 13, Disposal considerations*
Section 14, Transport information*
Section 15, Regulatory information*

Section 16, Other information, includes the date of preparation or last revision.

*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15 (29 CFR 1910.1200(g)(2)).

Employers must ensure that SDSs are readily accessible to employees.

For more information:

OSHA® Occupational Safety and Health Administration
U.S. Department of Labor
www.osha.gov (800) 321-OSHA (6742)