SAFETY DATA SHEETS

As an employer you should have a Safety Data Sheet (SDS) for every chemical that your employees use or are potentially exposed to. The actual OSHA standard, 1910.1200(g)(8) says:

“The employer shall maintain in the workplace copies of the required safety data sheets for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s). (Electronic access, microfiche, and other alternatives to maintaining paper copies of the safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options.)

HOW TO READ A SAFETY DATA SHEET (SDS)

At first glance, most safety data sheets are confusing. However, by knowing what’s in each section you can find the information that you are looking for quickly. Some sections such as Hazardous Ingredients, Transportation Information and Regulatory Information will be used mainly by the Safety Director.

OSHA requires all employees to be familiar with the hazards and precautions of the chemicals that they are working with. As an employee, this is your responsibility. Monthly safety meetings will help you to review and reinforce this information. You should not use a chemical that you don’t have an SDS for. All chemicals in use should be on the Hazardous Chemical inventory for your area. Employees should review the format and features of the SDS outlined below and familiarize themselves immediately.

The new Global Harmonization Standard (discussed below) requires that the information on the SDS is presented using consistent headings in a specified sequence. Each Safety Data Sheet is divided into approximately sixteen sections, and should include the following:

The format of the 16-section SDS should include the following sections:

Section 1. Identification
Section 2. Hazard(s) identification
Section 3. Composition/information on ingredients
Section 4. First-Aid measures
Section 5. Fire-fighting measures
Section 6. Accidental release measures
Section 7. Handling and storage
Section 8. Exposure controls/personal protection
Section 9. Physical and chemical properties
Section 10. Stability and 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, including date of preparation or last revision

Sections 12-15 may be included in the SDS, but are not required by OSHA.
GLOBAL HARMONIZATION STANDARD UPDATES

Under the Global Harmonization Standard (GHS), all labels will require the following elements:

- **Pictogram**: a symbol plus other graphic elements, such as a border, background pattern, or color that is intended to convey specific information about the hazards of a chemical. Each pictogram consists of a different symbol on a white background within a red square frame set on a point (i.e. a red diamond). There are nine pictograms under the GHS.

- **Signal words**: a single word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for less severe hazards.

- **Hazard Statement**: a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

- **Precautionary Statement**: a phrase that describes recommended measures to be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling of a hazardous chemical. Employees should review the precautionary statement on all safety data sheets or labels and ensure the proper precautions are taken when storing or handling chemicals.

*Please note- Safety Data Sheets using the GHS format outlined herein are currently being phased in, and after December 1, 2015 all SDS’s will be in this format.

GHS PICTOGRAMS

There are nine pictograms under the GHS to convey the health, physical and environmental hazards. The final Hazard Communication Standard (HCS) requires eight of these pictograms, the exception being the environmental pictogram, as environmental hazards are not within OSHA's jurisdiction. The hazard pictograms and their corresponding hazards are shown below.

<table>
<thead>
<tr>
<th>HCS Pictograms and Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard</td>
</tr>
<tr>
<td><img src="image" alt="Health Hazard" /></td>
</tr>
<tr>
<td>• Carcinogen</td>
</tr>
<tr>
<td>• Mutagenicity</td>
</tr>
<tr>
<td>• Reproductive Toxicity</td>
</tr>
<tr>
<td>• Respiratory Sensitizer</td>
</tr>
<tr>
<td>• Target Organ Toxicity</td>
</tr>
<tr>
<td>• Aspiration Toxicity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Gas Cylinder</td>
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</tbody>
</table>
Employers may choose to label workplace containers with the same label that would be on shipped containers for the chemical under GHS. Alternative labeling systems such as the National Fire Protection Association (NFPA) 704 Hazard Rating and the Hazardous Material Information System (HMIS) are permitted for workplace containers. However, the information supplied on these labels must be consistent with the revised HCS, e.g., no conflicting hazard warnings or pictograms.