Overview - OSHA revised its Haz Com Standard to align with the United Nations, Globally Harmonized System of Classification and Labeling of Chemicals (GHS). These changes will be phased in according to the chart to the right. The purpose of this document is to familiarize you with what to expect, when to expect it, and describe the new label elements and SDS format.

<table>
<thead>
<tr>
<th>Effective Completion Date</th>
<th>Requirements</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 1, 2013</td>
<td>Train employees on new label elements and SDS format</td>
<td>Employer</td>
</tr>
<tr>
<td>June 1, 2015</td>
<td>Comply with all modified provisions of the final rule.</td>
<td>Manufacturers, importers, distributors, employers</td>
</tr>
<tr>
<td>December 1, 2015</td>
<td>Distributors may ship products labeled by manufacturers under the old system until this date</td>
<td></td>
</tr>
<tr>
<td>June 1, 2016</td>
<td>Update alternative workplace labeling and Hazard Communication Programs as necessary, and provide additional training on updated physical or health hazards</td>
<td>Employer</td>
</tr>
</tbody>
</table>

What does this mean for you? It means you must become familiar with the elements of a GHS label as well as the new content and format of a Safety Data Sheet (SDS) (formerly called an MSDS). Individual laboratories must also begin to transition their MSDS files into SDS as they are received.

GHS Label Elements - GHS labels are standardized with no variation and include the following elements:

- **Symbols** (hazard pictograms SEE BELOW): Convey health, physical and environmental hazard information, assigned to a GHS hazard class and category.
- **Signal Words**: "Danger" or “Warning” are used to emphasize hazards and indicate the relative level of severity of the hazard, assigned to a GHS hazard class and category.
- **Hazard Statements**: Standard phrases assigned to a hazard class and category that describe the nature of the hazard.
- **Precautionary Statements**: Measures to minimize or prevent adverse effects. All applicable hazard statements must appear on a label
- **Product Identifier** (ingredient disclosure): How the chemical is identified. Name or number used for a hazardous product on a label or in the SDS. The information on the label and SDS must be the same
- **Supplier identification**: The name, address and telephone number should be provided on the label. Supplemental information: non-harmonized information.
- **Precautionary Statements**: A phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure or improper storage
- **Symbols** (hazard pictograms): Convey health, physical and environmental hazard information, assigned to a GHS hazard class and category.

**Pictograms** - must be contained a red outer square, a white background, and a black hazard symbol. OSHA has designated 8 pictograms under this standard. A pictogram must be listed for each of the hazards:

- Carcinogen Mutagen Reproductive Toxin
- Irritant Sensitizer Respiratory irritant
- Burns, Skin Corrosion, Eye Damage
- Acute Toxicity
- Flammables Pyrophoric Self Heating Organic Peroxides
- Oxidizers
- Explosives Self Reactive
- Gases under pressure
Changes to OSHA Hazard Communication Standard

Example GHS Label with Elements

Material Safety Data Sheets (MSDS) will phase into Safety Data Sheets (SDS)

Safety Data Sheet (SDS) An SDS will contain similar information as a current MSDS, however the information will always be under the same 16 categories. These categories will also always be in the same order. This should make it easier to find important information and alleviate searching. One example is that information on personal protective equipment will always be under section 8 (Exposure Controls/ Personal Protection). The information found in a SDS will always be identical to information on a GHS label.

1. Identification—Product identifier, manufacturer contact info, restrictions on use
2. Hazard Identification—Includes all hazards regarding chemical and label elements
3. Composition/ ingredients—Chemical ingredients, and trade name secrets
4. First Aid measures—Includes symptoms/ effects, acute, delayed and treatment
5. Firefighting measures—proper extinguishing techniques, equipment, hazards from fire
6. Accidental release measures—Emergency procedures, ppe, containment and cleanup
7. Handling and Storage—precautions for safe storage such as incompatibles
8. Exposure Controls/ PPE—Lists exposure limits, engineering controls, and ppe
9. Physical and chemical properties—Characteristics of a chemical
10. Stability and Reactivity—possible reactions and stability of the substance
11. Toxicological information—Routes of exposure, symptoms, effects, numerical toxicity measures
12. Ecological Information*
13. Disposal Considerations*
14. Transport information*
15. Regulatory Information*
16. Other information- preparation and revision dates

*These section must be present but OSHA doesn’t regulate the information found here.

For more information go to www.osha.gov/dsg/hazcom or email EHS at oehs@bu.edu