

Major changes to the Hazard Communication Standard and Global Harmonization System (GHS)

- **Hazard classification:** Provides specific criteria for classification of health and physical hazards, as well as classification of mixtures.
- **Labels:** Chemical manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. Precautionary statements must also be provided.
- **Safety Data Sheets:** Will now have a specified 16-section format.

Information and training: Employers are required to train workers by December 1, 2013 on the new label elements and safety data sheet format to facilitate recognition and understanding.

New GHS Classification and Labeling Materials are classified based on Criteria for Physical and Health Hazards

| SDS 16 Section Format |
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| 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 |

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| Health Hazard  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity | Flame  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides | Exclamation Mark  <ul style="list-style-type: none"> • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory) |
| Gas Cylinder  <ul style="list-style-type: none"> • Gases Under Pressure | Corrosion  <ul style="list-style-type: none"> • Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals | Exploding Bomb  <ul style="list-style-type: none"> • Explosives • Self-Reactives • Organic Peroxides |
| Flame Over Circle  <ul style="list-style-type: none"> • Oxidizers | Environment (Non-Mandatory)  <ul style="list-style-type: none"> • Aquatic Toxicity | Skull and Crossbones  <ul style="list-style-type: none"> • Acute Toxicity (fatal or toxic) |

New Labeling provisions under GHS label elements are:

1. Product identifier/ingredient disclosure
2. Supplier identification
3. Symbol/hazard pictograms
4. Signal Words
5. Hazard Statements
6. Precautionary information

| Label Elements Example | Category 1 | Category 2 |
|------------------------|---|---|
| Symbol |  |  |
| Signal Word | Danger | Warning |
| Hazard Statement | May be fatal if swallowed and enters airways. | May be harmful if swallowed and enters airways. |