Chemical labels and accompanying Safety Data Sheets are going through significant changes. They are being “harmonized” with a new international system, Globally Harmonized System of Classifying and Labeling of Chemicals (GHS). The new chemical labels are required to have:

1. **Product identifier**
2. **Supplier identification**
3. **Precautionary statement**: Provides information about how to prevent exposure to a chemical, how to respond to exposure, and how to store the chemical properly.
4. **Pictogram**: A symbol that is intended to quickly convey specific information about the hazards of a chemical. It is a black symbol on a white background within a red diamond.
5. **Signal word**: Indicates the severity of the hazard. WARNING used for less severe hazards DANGER used for severe hazards

6. **Hazard statement**: Describes the nature of the hazard.
7. **Supplemental information**: Contains extra information like direction for use and size of the container.

### GHS pictograms and hazard classes

- **Skull and Crossbones**
  - Acute toxicity (fatal or toxic)
- **Exclamation Mark**
- **Health Hazard**
  - Carcinogen
  - Mutagenicity
  - Reproductive toxicity
  - Respiratory sensitizer
  - Target organ toxicity
  - Aspiration toxicity
- **Corrosion**
  - Skin corrosion/burns
  - Eye damage
  - Corrosive to metals
- **Flame**
  - Flammables
  - Pyrophoric
  - Self-heating
  - Emits flammable gas
  - Self-reactives
  - Organic peroxides
- **Exploding Bomb**
- **Gas Cylinder**
  - Gasses under pressure
- **Flame Over Circle**
- **Environment**
  - (Non-mandatory)
  - Aquatic toxicity

### Sample Label

1. **Product identifier**
   - Code:
   - Product Name:
2. **Supplier identification**
   - Company Name:
   - Street Address:
   - City, State, Postal Code, Country:
   - Emergency Phone Number:
3. **Precautionary statement**
   - 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.
   - In Case of Fire: use dry chemical (BC) or Carbon Dioxide (CO2) fire extinguisher to extinguish.
4. **Pictograms**
5. **Signal word**
   - **DANGER**
6. **Hazard statement**
   - Highly flammable liquid and vapor.
   - May cause liver and kidney damage.
7. **Supplemental information**
   - Directions for Use:
   - Fill weight:
   - Gross weight:
   - Lot Number:
   - Fill Date:
   - Expiration Date:

### Safety Data Sheets

The new Safety Data Sheets (SDS) will contain a 16-section standardized format.

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

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