

Hazard Communication

Globally Harmonized System of Classification and Labeling of Chemicals

GHS pictograms and hazard classes

 Health hazard

 Physical hazard

 Environmental hazard



Skull and Crossbones
• Acute toxicity (fatal or toxic)



Exclamation Mark
• Irritant (skin and eye)
• Skin sensitizer
• Acute toxicity
• Narcotic effects
• Respiratory tract irritant
• Hazardous to ozone layer (Non-mandatory)



Health Hazard
• Carcinogen
• Mutagenicity
• Reproductive toxicity
• Respiratory sensitizer
• Target organ toxicity
• Aspiration toxicity



Corrosion
• Skin corrosion/burns
• Eye damage
• Corrosive to metals



Flame
• Flammables
• Pyrophorics
• Self-heating
• Emits flammable gas
• Self-reactives
• Organic peroxides



Exploding Bomb
• Explosives
• Self-reactives
• Organic peroxides



Gas Cylinder
• Gasses under pressure



Flame Over Circle
• Oxidizers



Environment
(Non-mandatory)
• Aquatic toxicity

Sample Label

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.

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.

First Aid

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

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: _____ Lot Number: _____

Gross weight: _____ 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)).