

Chemical Labels

Hazardous chemicals must have labels that list information about the hazards of the chemical, proper handling and what to do in the event of an emergency. As part of the hazard communication standard, labels on chemical containers from manufacturers and secondary transfer containers must have specified information. This information includes supplier information, product identifiers, pictograms, signal words, hazard statements and precautionary statements.

Supplier identification: The supplier of the hazardous chemical must include the following information on each label:

- The manufacturer name
- The manufacturer address
- A contact phone number for the manufacturer

Product identifiers: Each hazardous chemical must have a unique product identifier.

- It must be the same as the identifier listed in Section 1 of the safety data sheet (SDS) and in the hazardous chemical inventory.
- It must have the same chemical identity and additional identifiers based on international standards, such as International Standards Organization (ISO) or Chemical Abstract Service (CAS) number.
- The chemical identifier for each component of a mixture must be included.

Pictograms: These are graphic images that have been standardized under the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

- They are determined by the hazard class and category.
- A different pictogram appears for each hazard class.
- Pictograms are required to have an image inside a red border with a white background in the shape of a diamond standing on its point.
- Transport pictograms may have colors as noted under the UN Recommendations on the Transport of Dangerous Goods, Model Regulations but will have the same image and shape.



Gas cylinder

Signal words: Signal words are either "Warning" or "Danger".

- They indicate the severity of the hazard.
- Only one of the signal words can appear on the label.
- "Danger" indicates a more severe hazard than "Warning".

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Hazard statements: These are standardized statements that are based on scientific data and the severity of the hazard. A different hazard statement will appear for each physical and health hazard.

- The health hazard statement is specific to each potential route of exposure.
- Sample hazard statements:
 - “Toxic if swallowed”
 - “Flammable aerosol”

Precautionary statements: These are standardized statements that provide information for the proper handling of the chemical to prevent environmental and health exposures.

- Required sections include:
 - **Prevention:** Includes details for safe handling and engineering controls.
 - **Response to spill or exposure:** Steps to be taken if a skin or eye exposure occurs.
 - **Storage:** Indicates required storage cabinets or ventilation.
 - **Disposal:** Indicates if any special considerations must be made.
- GHS also suggests that first aid information be included in the precautionary statement section.

PRECAUTIONARY STATEMENTS
Keep container tightly closed. Store in 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 measure 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 (CO ₂) fire extinguisher to extinguish.
First Aid If exposed call Poison Center. If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.

Supplemental information: Some labels may have additional hazard information not included in the other sections of the label or currently incorporated into GHS.

- This information may be added by the manufacturer or distributor.
- The information must not conflict with what is already presented on the label.
- National Fire Protection Agency (NFPA) and Hazardous Materials Information System (HMIS) labels would go in this section and are allowed as long as they don't contradict any information already on the label.

Hazardous chemical labels and SDSs must be reviewed prior to beginning any work with chemicals.