

## Globally Harmonized System Labeling Requirements

All chemicals in both primary and secondary containers must be labelled according to the Globally Harmonized System (GHS) requirements established by the United Nations to create consistency for the identification and written communication of a chemical hazards.

All required information for labeling can be found on the chemical's Safety Data Sheet.

*All container labels must contain the following information:*

1. Product Identifiers
2. Supplier Information
3. Pictograms
4. Hazard Statements
5. Precautionary Statement
6. Signal Word

### 1. Product Identifiers

The product identifier is the product name, code, or number that allows you to identify the chemical in the container.

### 2. Supplier Information

The supplier identification must include the name, address, and telephone number for the company supplying the chemical.

### 3. Pictograms

Pictograms are black graphic symbols with a white background surrounded by a red diamond. They convey specific information about the hazards of the chemical. There are nine pictograms.

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

## 4. Hazard Statements

Hazard statements describe the nature and degree of the chemical's hazard. Hazard statements can include information on fatal or toxic exposures, organ damage, and routes of exposure.

Examples:

- "Highly Flammable Liquid and Vapor"
- "May cause Liver and Kidney Damage"

## 5. Precautionary Statements

Precautionary Statements are brief descriptions of measures to be taken to minimize or prevent harmful effects from exposure to a chemical or improper storage or handling. There are four types of precautionary statements: Prevention, Response, Storage, and Disposal.

Examples:

- Prevention- "Wash hands thoroughly after handling"
- Response- "If swallowed immediately call a poison center"
- Storage- "Store in a well-ventilated location"
- Disposal- "Dispose in accordance with local, regional, and national, regulations as specified."

## 6. Signal Words

Safety Data Sheets and Chemical labels will include one of two signal words,

Danger or Warning, that identify the severity of the hazard present. "Danger" is the more serious of the signal words and indicates a higher level of hazard. "Warning" is less serious and indicates a lower hazard level.

## Example of GHS Container Label

Six elements of the Globally Harmonized Standard (GHS) label format

