



# Globally Harmonized A System for Hazard Communication

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The Occupational Safety and Health (OSH) Act was enacted to assure safe and healthful working conditions. The OSH Act created the Occupational Safety and Health Administration (OSHA) at the federal level which decided that states could run their own safety and health programs if those programs were at least as effective as the federal program. Federal and state personnel work to ensure worker safety and health in the following ways: work site enforcement; education; compliance assistance; and participation in cooperative voluntary programs.

# What is GHS?

The GHS is a Globally Harmonized System of Classification and Labelling of Chemicals, and it is a worldwide initiative to promote standard criteria for classifying chemicals according to their health, physical and environmental hazards.

In 2003, the United Nations (UN) adopted the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). This system ensures that if a material is considered toxic in China, then it was also be so in the USA, Europe and elsewhere around the globe.

## What does GHS do?

The primary goal of GHS is better protection of human health and the environment by providing chemical users, handlers, emergency first responders and the public with enhanced and consistent information on chemical hazards.

The GHS includes criteria for specifying what information should be included on labels of hazardous chemicals as well as safety data sheets (SDS).

The GHS uses pictograms, hazard statements, and the signal words “Danger” and “Warning” to communicate hazard information on product labels and safety data sheets in a logical and comprehensive way.

WATCH THE VIDEO



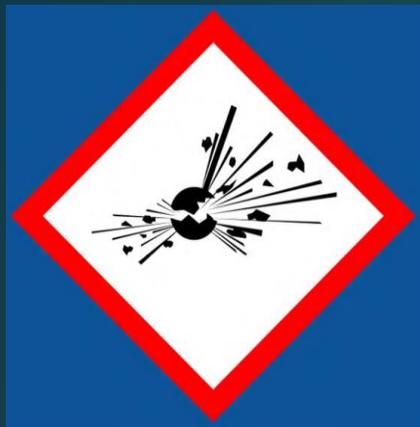
# Chemical Safety



<https://youtu.be/9yXc1hU1VQ4?t=1>

– GHS –  
Pictograms





# Explosion Bomb

Used to indicate :

Explosives; Self-reactive substances; Organic peroxides



# Flame

Used to indicate :

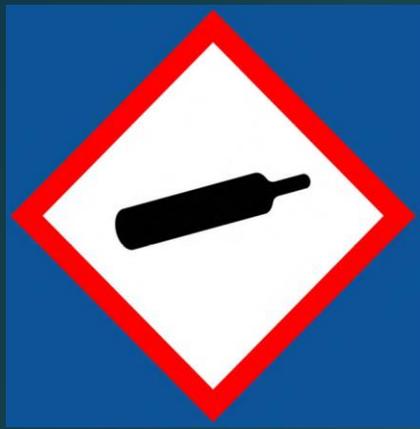
Flammables; Emits flammable gas; Self-reactive substances; Pyrophoric; Self-heating substances; Organic peroxides



# Flame Over Circle

Used to indicate :

Oxidizers



# Gas cylinder

Used to indicate :  
Gases under pressure



# Corrosion

Used to indicate :  
Skin corrosion / burns; Eye damage; Corrosive to metals



# Skull & Crossbones

Used to indicate :  
Acute toxicity (fatal or toxic)



# Exclamation Mark

Used to indicate :

Acute toxicity; Irritant to skin & eyes; Skin sensitizer; Narcotic effects;  
Respiratory tract irritant; Hazard to ozone layer



# Health Hazard

Used to indicate :

Carcinogen; Mutagen; Reproductive toxicity; Respiratory sensitizer; Target organ  
toxicity; Aspiration hazard

# GHS Signal Words

Signal word indicates the relative danger or severity of a hazard.

The signal words are *DANGER* & *WARNING*



Used for more severe hazards



Used for less severe hazards

# GHS Statements

**HAZARD STATEMENT** A statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical; including, where appropriate, the degree of hazards.

## Example Hazard Statements

"Fatal if swallowed"

"Toxic if swallowed"

"May be harmful if swallowed"

"Highly flammable liquid & vapor"

"Damage caused by prolonged or repeated exposure"



**PRECAUTIONARY STATEMENTS** A phrase that describes recommended measure to be taken that minimize or prevent adverse effect resulting from exposure; improper storage, and/or handling.

## Example Precautionary Statements

"Wear protective gloves"

"Wash thoroughly after handling."

"Wear splash protection for face"

"Keep away from heat / sparks /open flame"

"Do not eat, drink, or smoke when using this product"

"Use explosion-proof electrical equipment"

"Store in a well-ventilated area"

"Do not breathe dust"



# EXAMPLE LABEL

**GHS Inner Container Label** (i.e. bottle inside shipping box)



**ToxiFlam** (Contains: XYZ)

Danger! Toxic If Swallowed, Flammable Liquid and Vapor

Do not eat, drink or use tobacco when using this product. Wash hands thoroughly after handling. Keep container tightly closed. Keep away from heat/sparks/open flame. - No smoking. Wear protective gloves and eye/face protection. Ground container and receiving equipment. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Store in cool/well-ventilated place.

IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician. Rinse mouth. In case of fire, use water fog, dry chemical, CO<sub>2</sub>, or "alcohol" foam.

See Safety Data Sheet for further details regarding safe use of this product.  
MyCompany, MyStreet, MyTown NJ 00000, Tel: 444 999 9999

Example Label: GHS Inner Container Label (i.e. bottle inside shipping box)



## ToxiFlam (Contains: XYZ)

**Signal Word** Danger!

**Hazard Statement** Toxic If Swallowed, Flammable Liquid and Vapor

**Precautionary Statement** Do not eat, drink or use tobacco when using this product. Wash hands thoroughly after handling. Keep container tightly closed. Keep away from heat/sparks/open flame. - No smoking. Wear protective gloves and eye/face protection. Ground container and receiving equipment. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Use only non-sparking tools. Store in cool/well-ventilated place.

IF SWALLOWED: Immediately call a POISON CONTROL CENTER or doctor/physician. Rinse mouth. In case of fire, use water fog, dry chemical, CO<sub>2</sub>, or "alcohol" foam.

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