

# Globally Harmonised System (GHS)

## Fact Sheet

### What is the GHS?

GHS is the abbreviation for Globally Harmonised System of Classification and Labelling of Chemicals. It is developed by the United Nations for:

- Chemical hazard classification
- Hazard communication through GHS labels, GHS safety data sheets, and training

### What are the purposes of the GHS?

The purpose of the GHS is to

- Enhance the protection of humans and environment against hazardous chemicals
- Facilitate international trading of chemicals

### What are your roles in GHS implementation?

Chemical manufacturers and suppliers must classify and label their products, prepare the SDS, and provide the information to customers of chemicals.

Employers and factory occupiers must obtain the SDS, label the containers and inform their employees about the hazards involved and the precautions to take.

 <p>Irritant</p>	 <p>Environmental toxicity</p>	 <p>Carcinogenicity</p>
 <p>Gases under pressure</p>	 <p>Corrosive</p>	 <p>Acute toxicity (severe)</p>
 <p>Explosive</p>	 <p>Flammable</p>	 <p>Oxidiser</p>

### What is GHS Hazard Classification?

Chemicals are classified into different classes or categories based on their:

- Physical properties
- Health effects or toxicity
- Environmental toxicity

The classified chemicals are assigned to a fixed set of GHS pictograms.

# Acknowledgement

This leaflet was prepared by the National GHS Task Force comprising representatives from EDB, HSA, MOM, MTI, NEA, SCDF, SCIC, SISO, SPRING Singapore and SPF.

The Task Force would like to thank the Singapore Chemical Industry Council Limited for allowing it to reproduce information from its Guidebook on GHS of Classification and Labeling of Chemicals.

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## What is a GHS label?

The label provides a summary of the chemical's hazards and warns the user to take precautions if necessary.

All containers and packages of classified chemicals must be affixed with a GHS label which consists of:

- Product identifier
- GHS pictogram
- Signal word (Danger or Warning)
- Hazard statement
- Precautionary statement
- Supplementary information
- Supplier information

### Iso Propyl Alcohol

#### DANGER

May cause drowsiness or dizziness  
 Highly flammable liquid and vapour  
 May be harmful if swallowed  
 May be fatal if swallowed and enters airways  
 Causes serious eye irritation

- Keep away from heat/sparks/open flames/hot surfaces.
- No smoking.
- Ground/bond container and receiving equipment.
- Use only outdoors or in a well-ventilated area
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Container remains hazardous when empty.  
 Refer to Manufacturer's Safety Data Sheet.

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*Disclaimer: Label is produced not to scale and with the available known data at the point of print.*



## What are GHS SDS?

SDS are hazard communication sheets providing information on the identity of hazardous chemicals, their properties and hazards, measures on safe handling, storage, transport and disposal of the chemicals, as well as first aid and emergency response.

GHS SDS is prepared in accordance to with the following 16-section format

- 1) Identification
- 2) Hazards identification
- 3) Composition & information on ingredients
- 4) First-aid measures
- 5) Fire-fighting measures
- 6) Accidental release measures
- 7) Handling & storage
- 8) Exposure control & personal protection
- 9) Physical & chemical properties
- 10) Stability and reactivity
- 11) Toxicological information
- 12) Ecological information
- 13) Disposal considerations
- 14) Transport information
- 15) Regulatory information
- 16) Other information

## Why is training important?

This ensures that users understand the risks and precautionary measures identified on the label and SDS.

Under Section 12 of the Workplace Safety and Health Act, it is the duty of employers to ensure that persons at work have adequate instruction, information, training and supervision to perform their work.

## Why is GHS hazard communication important in chemical management?

Hazard communication through labeling, SDS and training is an integral part of chemical management. The GHS provides the underlying infrastructure for the establishment of a chemical safety programme, which forms part of the safety and health management system.

## What is the timeline for GHS Implementation?

Phase	Target Industry	GHS focus
Phase 1A 2 years wef 1 Nov 08 (by end 2010)	All Chemical manufacturers / suppliers	Preparation of GHS SDS & Label for single chemicals/ substances
Phase 2A 3 yr (by end 2011)	All Users of chemicals	GHS Labelling of containers for single chemicals / substances
Phase 1B 4 yr (by end 2012)	All Chemical manufacturers / suppliers	Preparation of GHS SDS & label for mixtures
Phase 2B 5 yr (by end 2013)	All Users of chemicals	GHS Labelling of containers for mixtures

## Where can I find more information?

1. Singapore Standard SS 586:2008 on Specification on Hazard Communication for Hazardous Chemicals and Dangerous Goods. Details on purchasing can be found at <http://www.singaporestandardseshop.sg/Product/Home.aspx>
2. Guidebook on GHS of Classification and Labeling of Chemicals (by SCIC) details on purchasing can be found at <http://www.scic.sg/>
3. Workplace Safety and Health Act (WSHA) and its subsidiary legislation can be downloaded from [http://www.mom.gov.sg/publish/momportal/en/legislation/Occupational\\_Safety\\_and\\_Health/workplace\\_safety\\_and.html](http://www.mom.gov.sg/publish/momportal/en/legislation/Occupational_Safety_and_Health/workplace_safety_and.html)
4. United Nation's GHS document (revision two) can be downloaded from [http://www.unece.org/trans/danger/publi/ghs/ghs\\_rev02/02files\\_e.html](http://www.unece.org/trans/danger/publi/ghs/ghs_rev02/02files_e.html)