










Classification, Labelling and Packaging [CLP] of Substances & Mixtures – New EU Regulations for a Globally Harmonised System [GHS].

The CLP Regulation entered into legal effect in all EU Member States on 20 January 2009 and following a lengthy transitional period, came fully into force on 1st June 2015. These regulations fully replace Chemical Hazard Information & Packaging Regulations [CHIP 4].

CLP Hazard Pictograms

HEALTH HAZARDS	
	Acute toxicity , Very toxic (fatal), Toxic etc.
	Harmful skin irritation, serious eye irritation
	Respiratory sensitiser, mutagen, carcinogen, reproductive toxicity, systemic target organ toxicity, aspiration hazard
	Corrosive (causes severe skin burns and eye damage), serious eye damage
PHYSICAL HAZARDS	
	Flammable gases, liquids, solids, aerosols, organic peroxides, self-reactive, pyrophoric, self-heating, contact with water emits flammable gas
	Gases under pressure

	Oxidising gases, liquids, solids
	Explosive, self-reactive, organic peroxides
ENVIRONMENTAL HAZARDS	
	Harmful to the environment

CLP Hazard & Precautionary Statements

Hazard statements

A hazard statement is a phrase that describes the nature of the hazard in the substance or mixture. These replace the 'risk or R-phrase' used in CHIP. Examples of hazard statements include.

- **H240** - Heating may cause an explosion
- **H320** - Causes eye irritation
- **H401** - Toxic to aquatic life

Precautionary statements

A precautionary statement is a phrase that describes recommended measure(s) to minimise or prevent adverse effects resulting from exposure to a hazardous substance or mixture due to its use or disposal.

Examples of precautionary statements include:

- **P102** - Keep out of reach of children
- **P271** - Use only outdoors or in well-ventilated area
- **P410** - Protect from sunlight

Suppliers determine the appropriate precautionary statements (usually no more than six) based on the required hazard statements. It replaces the 'safety or S-phrase' used in CHIP 4.

[See Appendix I](#) for a full list of Hazard and Precautionary Statements

CLP -Signal words

The CLP Regulation also introduces two new signal words: '**Danger**' and '**Warning**'.

If the chemical has a more severe hazard, the label includes the signal word 'Danger'; in case of less severe hazards, the signal word is 'Warning'.

[Appendix 2](#) is a very useful chart produced by Merck showing pictograms, Hazard statements/Risk phrases under both CLP and CHIP4 respectively.

CLP Labelling

The following is an example showing the components of a complaint label

The Basic Parts of A GHS-Compliant Label

1 → **n-Propyl Alcohol**
UN No. 1274
CAS No. 71-23-8

2 → **DANGER**

3 → Highly flammable liquid and vapor. Causes serious eye damage.
May cause drowsiness and dizziness.

4 → Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing fumes/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present. Continue rinsing.

Fill Weight: 18.65 lbs. Lot Number: B56754434
Gross Weight: 20 lbs. Fill Date: 6/21/2013
Expiration Date: 6/21/2020 See SDS for further information.

5 → Acme Chemical Company • 711 Roadrunner St. • Chicago, IL 60601 USA • www.acmechem.com • 123-444-5567

6 →

- 1. Product Identifier** - Should match the product identifier on the Safety Data Sheet.
- 2. Signal Word** - Either use "Danger" (severe) or "Warning" (less severe)
- 3. Hazard Statements** - A phrase assigned to a hazard class that describes the nature of the product's hazards
- 4. Precautionary Statements** - Describes recommended measures to minimize or prevent adverse effects resulting from exposure.
- 5. Supplier Identification** - The name, address and telephone number of the manufacturer or supplier.
- 6. Pictograms** - Graphical symbols intended to convey specific hazard information visually.

CLP & Safety Data Sheets [SDS]

Safety data sheets (SDS) are key documents in the safe supply, handling and use of chemicals. They should help to ensure that those who use chemicals in the workplace do so safely with risk of harm to users or the environment. The requirement to provide an SDS actually comes from the REACH regulations which lay down the format that suppliers must follow when producing an SDS. The SDS must be dated and contain the information necessary under the following headings, to allow employers to do a risk assessment as required by the Control of Substances Hazardous to Health Regulations (COSHH).

1. Identification of the substance/mixture and of the company/undertaking;
2. Hazards identification;
3. Composition/information on ingredients;
4. First-aid measures;
5. Fire-fighting measures;
6. Accidental release measures;
7. Handling and storage;
8. Exposure controls/personal protection;
9. Physical and chemical properties;
10. Stability and reactivity;
11. Toxicological information;
12. Ecological information;
13. Disposal considerations;
14. Transport information;
15. Regulatory information;
16. Other information.

The SDS itself is not an assessment. However it will describe the hazards helping employers assess the probability of those hazards arising in the workplace.

Guidance on how to interpret information in the SDS and incorporate into a risk assessment is contained within the following guidance document:

[Risk Assessment and Management - Processes Using Hazardous Substances](#)

