



CLP and GHS

The Classification, Labelling and Packaging
Regulation (EC) No 1272/2008

US Clients
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What is CLP?

- Classification Labelling and Packaging Regulation
- EU's method to move to an international harmonised system for chemicals based on the voluntary United Nations Globally Harmonised System which was the result of the UN convention in Rio 1992
- CLP has become a Regulation from January 2009 after years of development and will be implemented in stages until 1st June 2015
 - Substances affected from 1st December 2010
 - Mixtures (Preparations) from 1st June 2015

The development of GHS and CLP

- GHS being implemented across the globe with variations in both content and timetable from region to region.
- Many countries have no detailed timetables in place and some have not fully committed as yet.
- The CLP uses the GHS as a basis for the vast majority of its content but adds to it where there is an existing EU classification that is not represented in GHS.
- Replaces Directives 67/548/EEC and 1999/45/EC, amends and uses the same terminology as REACH

Headline changes

Change of emphasis from Hazard to Risk in line with REACH

Replacement of existing Safety Data Sheets and labels over time (as in REACH).

Changes and additions to classification types

Replacement of “preparation” with “mixture”

Replacement of Risk and Safety phrases with Hazard and Precautionary statements

Addition of Signal words – Danger & Warning

Replacement of current Pictograms with GHS versions

Scope of application of CLP

- Scope of CLP is the same as for REACH
 - ❖ Considerable number of exemptions where other regulations are already in place these include;
 - Cosmetic products
 - Substances and mixtures which are subject to customs supervision.
 - Products and additives used in animal nutrition
 - Flavourings and food additives intended for human consumption
 - Medical devices of various types
 - Medicinal products for veterinary or human use
 - Where substances and mixtures are transported by air, sea, road, rail or inland waterways.

Scope of application of CLP (2)

Subject to developments at UN level, the classification and labelling of persistent, bioaccumulative and toxic (PBT) and very persistent and very bioaccumulative (vPvB) substances should be included in this Regulation at a later stage.

Classification changes - example: Acute toxicity - Oral

Changes in classification are numerous but follow the same pattern, this example shows the increase in Categories and the relationship with LD₅₀

Acute Toxicity - Oral

EU	T ⁺ R28	T R25	Xn R22				
LD ₅₀	≤5	5-25	25-50	50-200	200-300	300-2000	2000-5000
GHS	Cat 1	Category 2	Category 3	Category 4	Category 5		

To simplify the transition process there are tools given within the regulation to assist re-classification such as Annex VII which is a translation table

Classification changes example: Acute toxicity - Aquatic

- CLP and GHS criteria for the hazards on the aquatic environment practically the same
 - ❖ 3 classes of acute toxicity, based on the 96 hr LC₅₀, 48 hr EC₅₀ and 72-96 hr ER₅₀ values)
- Generally EU system combines the acute with the chronic toxicity
 - ❖ GHS puts them in separate classes.
- EU has no individual class for R51
 - ❖ This class seems to correspond with the GHS “Class: Acute II”.

Classification - requirements for testing

- No requirements
 - ❖ any additional required information will be generated by REACH

(20). “While a manufacturer, importer or downstream user of any substance or mixture should not be obliged to generate new toxicological or eco-toxicological data for the purpose of classification, he should identify all relevant information available to him on the hazards of the substance or mixture and evaluate its quality.”

Labeling changes – pictograms



Replaces the Irritant/harmful cross.



New health hazard symbol

Other symbols change as follows:



Labelling changes – phrases

The change from Risk phrase to Hazard statement involves some new and many amended

New hazard statements for labels, for example:

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

New precautionary statements for labels, for example:

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

Annexes to the Regulation

- Comprise 1319 pages of the entire 1355 pages of CLP
 - ❖ ANNEX I - CLASSIFICATION AND LABELLING REQUIREMENTS FOR HAZARDOUS SUBSTANCES AND MIXTURES
 - ❖ ANNEX II - SPECIAL RULES FOR LABELLING AND PACKAGING OF CERTAIN SUBSTANCES AND MIXTURES
 - ❖ ANNEX III - LIST OF HAZARD STATEMENTS, SUPPLEMENTAL HAZARD INFORMATION AND SUPPLEMENTAL LABEL ELEMENTS
 - ❖ ANNEX IV - LIST OF PRECAUTIONARY STATEMENTS
 - ❖ ANNEX V - HAZARD PICTOGRAMS
 - ❖ ANNEX VI - HARMONISED CLASSIFICATION AND LABELLING FOR CERTAIN HAZARDOUS SUBSTANCE
 - ❖ ANNEX VII - TRANSLATION TABLE FROM CLASSIFICATION UNDER DIRECTIVE 67/548/EEC TO CLASSIFICATION UNDER THIS REGULATION

General comments on the regulation

- Far more similarities to the existing regulations than there are differences
 - ❖ highly visible nature of the changes that are being made tend to give an exaggerated picture.
- However changes that are being made are drastic and will involve considerable costs in addition to the already high costs of implementing REACH

Significant Costs

Several constituents to the implementation of CLP that produce significant costs to industry but they can be grouped into three;

- Development costs – These are primarily the same as REACH
- Production and dissemination costs – The actual physical design and manufacture of labels, printing of safety data sheets and other packaging together with their delivery and use.
- Training costs - The cost of re-training all levels of users to a suitable level of expertise in both systems.

Summary

- CLP changes the classifications using primarily the same data
- The changes to labels are very considerable and safety data sheets are changed somewhat.
- There are considerable costs.
- Use, distribution and other aspects have not changed.
- The staged implementation allows needed work to be carried out via REACH and other methods