CLASSIFICATION AND LABELLING OF CHEMICALS IN EU

Banja Luka – 16th November 2016

Gaetano Garramone

ICPS - Centro Internazionale per gli Antiparassitari e la Prevenzione Sanitaria

gaetano.garramone@asst-fbf-sacco.it

INDEX

- Introduction
- GHS and classification
- CLP Regulation: general issues
- Hazard classes and categories
- Classification of mixtures
- Labelling and elements for labelling
- CLP and Transport of Dangerous Goods (TDG)

INDEX

- Introduction
- GHS and classification
- CLP Regulation: general issues
- Hazard classes and categories
- Classification of mixtures
- Labelling and elements for labelling
- CLP and Transport of Dangerous Goods (TDG)

INTRODUCTION

- ✓ Chemicals are everywhere, and are an essential component of our daily lives.
- ✓ At the same time, some chemicals can severely damage our health, and others can be dangerous if not properly used.
- ✓ Risks associated to chemicals *should* be indicated along the supply chain.
- ✓ A lot of countries, including EU, adopted system to grant an adequate safety level during production, transport, use and disposal of chemicals.
- ✓ Such systems are often diametrically opposite to each other.

INDEX

- Introduction
- GHS and classification
- CLP Regulation: general issues
- Hazard classes and categories
- Classification of mixtures
- Labelling and elements for labelling
- CLP and Transport of Dangerous Goods (TDG)

THE GHS

(http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html)

- GHS stands for Globally Harmonized System of Classification and Labelling of Chemicals.

- Why the GHS? Each country in the world had its own standards for determining chemical hazards and its own system for communicating them. These differences often create confusion and expenses to companies manufacturing, using and selling their chemical products across national borders, further requiring that each chemical be re-classified for that specific market. The GHS is intended to replace these multiple systems with a single unified approach.

- The GHS is a system to standardize the classification of chemicals, by using the same criteria all over the world to determine if a material is HAZARDOUS.

- The GHS also has the ambition to harmonize communication of hazards, by means of Labels and Safety Data Sheets.

THE CLASSIFICATION

CLASSIFICATION: the classification of a substance or mixture reflects the type and severity of the hazards of that substance or a mixture (i.e. its potential to cause harm to humans or the environment).

Hazard identification → Classification

Hazard identification, and then classification,

needs established criteria!!

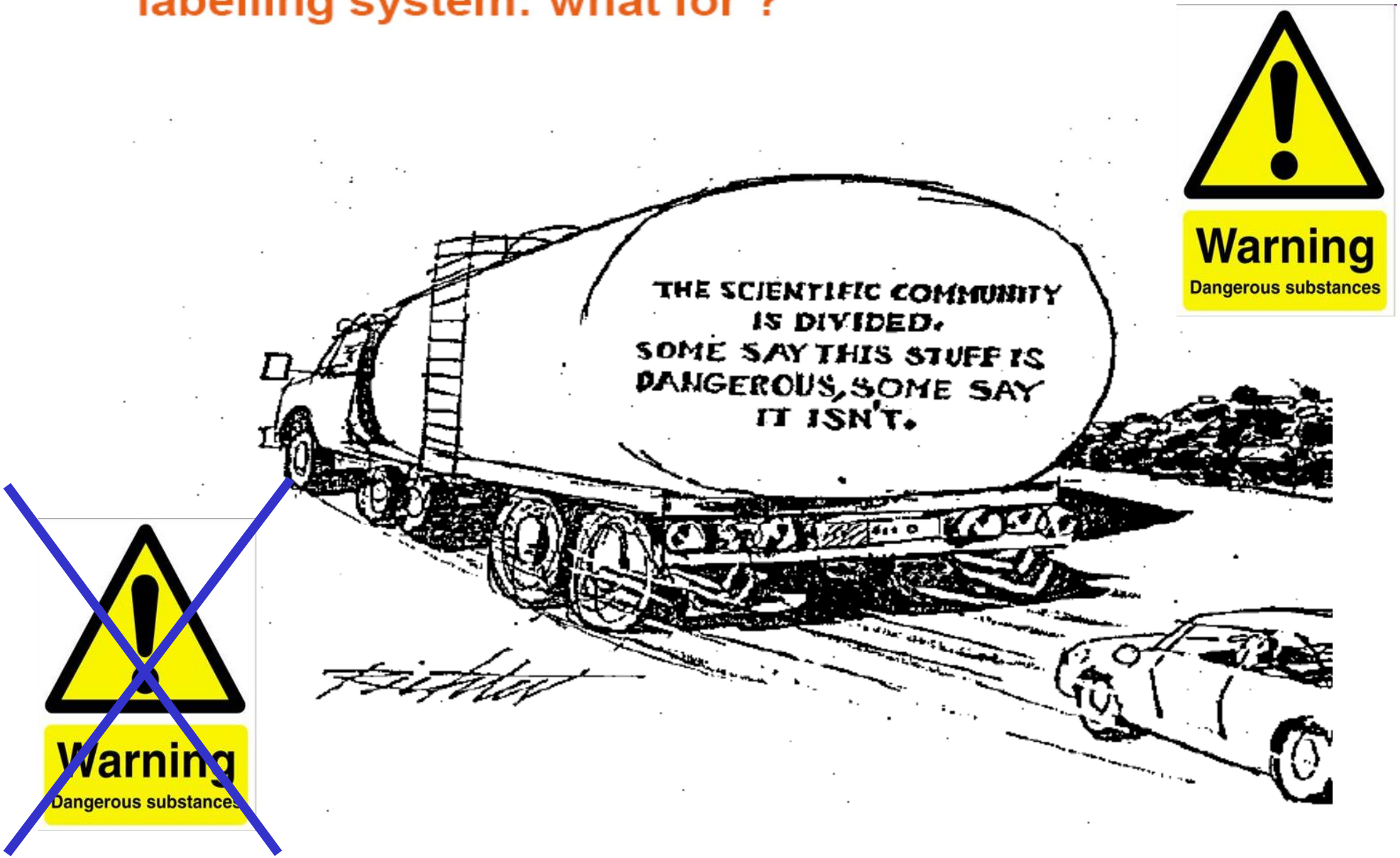
WHY DO WE NEED A GLOBAL SYSTEM?

Once upon a time…

Substance – oral toxicity LD_{50} = 257 mg/kg b.w.

GHS	Danger (Skull and cross bones)
Transport	a) liquid: slightly toxic b) solid: not classified
EU (DSD)	Harmful (S. Andrew's cross)
US	Toxic
CAN	Toxic
Australia	Harmful
India	Non-toxic
Japan	Toxic
Malaysia	Harmful
Thailand	Harmful
New Zealand	Hazardous
China	Not Dangerous
Korea	Toxic

A globally harmonised hazard classification and labelling system: what for ?



THE GHS CONCEPT OF CLASSIFICATION

(GHS, Rev.4, Chapter 1.3.2.2)

- ✓ The GHS uses the term "hazard classification" to indicate that only the intrinsic hazardous properties of substances or mixtures are considered.
- ✓ Hazard classification incorporates three steps:

- Identification of relevant data regarding the hazard of a substance or mixture;
- Subsequent review of those data to ascertain the hazard associated with the substance or mixture;
- A decision on whether the substance or mixture will be classified as a hazardous substance or mixture and the degree of hazard, where appropriate, by comparison of the data with agreed hazard classification criteria.

BUILDING BLOCK APPROACH (1)

- The GHS will allow the hazard communication elements of the existing systems to converge.
- The harmonized elements of the GHS may be seen as a collection of building blocks available to build a regulatory frame.

BUILDING BLOCK APPROACH (2)

- According to the building block approach, countries are free to determine which of the building blocks will be applied in different parts of their systems.
- Competent authorities will decide how to apply the various elements of the GHS based on the needs of the competent authority and the target audiences.

GHS will not be completely "harmonised" at first !!!!

INDEX

- Introduction
- GHS and classification
- CLP Regulation: general issues
- Hazard classes and categories
- Classification of mixtures
- Labelling and elements for labelling
- CLP and Transport of Dangerous Goods (TDG)

CLASSIFICATION AND LABELLING IN EU
(Legislation)

REGULATION (EC) No. 1272/2008
(or CLP Regulation)

which is the "recent" European Regulation on CLP
(Classification/Labelling/Packaging)

- **It was published on the Official Journal of EU on 31/12/2008**
- **It entered into force on 20/01/2009**

The regulation incorporates the classification criteria and labelling rules agreed at GHS level.

It introduces new classification criteria, hazard symbols (pictograms) and labelling phrases, while taking account of elements which are part of the previous EU legislation.

THE CLP REGULATION

LEGAL TEXT

Title I	**General Issues**
Title II	**Hazard Classification**
Chapter 1	Identification and examination of information
Chapter 2	Evaluation of hazard information and decision on classification
Title III	**Hazard communication in the form of labelling**
Chapter 1	Content of the label
Chapter 2	Application of labels
Title IV	**Packaging**
Title V	**Harmonisation of C&L(*) of substances and the C&L inventory**
Chapter 1	Establishing harmonised classification and labelling of substances
Chapter 2	Classification and labelling inventory
Title VI	**Competent authorities and enforcement**
Title VII	**Common and final provisions**

(*) Classification and Labelling

THE CLP REGULATION

TECHNICAL ANNEXES

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 substances
Annex VII	**Translation table** from classification under Directive 67/548/EEC to classification under this Regulation

THE CLP REGULATION SHALL APPLY TO…

- **Chemical substances and mixtures, <u>including biocides and pesticides</u>**
- **Explosive and pyrotechnic articles**

(*with some exceptions: devices such that their inadvertent or accidental ignition or initiation shall not cause any external effect either by projection, fire, smoke, heat or loud noise*)

CLASSIFICATION IN EU

- ✓ The decision on a particular classification for a substance or mixture is mostly taken by the supplier of the substance or mixture ("**self-classification**").
- ✓ In certain cases the decision on the classification of a substance is taken at Community level. The classification decided at Community level is called "**Harmonised Classification**". The harmonised classification decided at Community level for several thousands of substances are listed in Annex VI to CLP.

  NOTICE: Active substances of PPPs shall have a harmonized classification in EU
- ✓ The use of a harmonized classification is mandatory. Self-classification for substances to be made for hazard classes not appearing in the harmonized classifications.
- ✓ The self-classification procedure always apply in the case of mixtures

….**and PPPs ARE MIXTURES!!**

HARMONIZED CLASSIFICATION & LABELLING (CLH)

HARMONISED ⟷ **INTERNATIONALLY AGREED**

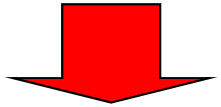
A list of hazards associated to some substances agreed at a community level (for example at European level), together with their hazard communication elements.

INDEX

- Introduction
- GHS and classification
- CLP Regulation: general issues
- Hazard classes and categories
- Classification of mixtures
- Labelling and elements for labelling
- CLP and Transport of Dangerous Goods (TDG)

SOME DEFINITIONS

- ***Hazardous*** means fulfilling the criteria relating to physical hazards, health hazards or environmental hazards.
- ***Hazard class*** means the nature of the physical, health or environmental hazard.
- ***Hazard category*** means the division of criteria within each hazard class, specifying hazard severity.



Each hazard class is divided into hazard categories.

CLASS & CATEGORIES: CODES

Examples

Flam. Liq. 1	Carc. 1B	STOT SE 2
Flam. Liq. 2	Carc. 2	STOT SE 3
Flam. Liq. 3	Acute Tox. 1	Aquatic Acute 1
Skin Corr. 1A	Acute Tox. 2	Aquatic Chronic 1
Skin Corr. 1B	Acute Tox. 3	Aquatic Chronic 2
Skin Corr. 1C	Acute Tox. 4	Aquatic Chronic 3
Carc. 1A	STOT SE 1	Aquatic Chronic 4

ENDPOINTS COVERED BY CLP

- **PHYSICAL HAZARDS (16 CLASSES)**

- **HEALTH HAZARDS (10 CLASSES)**

- **ENVIRONMENTAL HAZARDS (2 CLASSES)**

PHYSICAL HAZARDS

1. Explosives (Chap.2.1)
2. Flammable gases (Chap.2.2)
3. Flammable aerosols (Chap.2.3)
4. Oxidizing gases (Chap.2.4)
5. Gases under pressure (Chap.2.5)
6. Flammable liquids (Chap.2.6)
7. Flammable solids (Chap.2.7)
8. Self-reactive substances and mixtures (Chap.2.8)
9. Pyrophoric liquids (Chap.2.9)
10. Pyrophoric solids (Chap.2.10)
11. Self-heating substances and mixtures (Chap. 2.11)
12. Substances and mixtures which, in contact with water, emit flammable gases (Chap.2.12)
13. Oxidizing liquids (Chap.2.13)
14. Oxidizing solids (Chap.2.14)
15. Organic peroxides (Chap.2.15)
16. Corrosive to metals (Chap.2.16)

NOTICE: ***Physical Hazard Classes*** *are relevant for the risk assessment related to* ***Safety***

HEALTH HAZARDS

1) Acute toxicity (Chap.3.1)
2) Skin corrosion/irritation (Chap.3.2)
3) Serious eye damage/eye irritation (Chap.3.3)
4) Respiratory or skin sensitization (Chap.3.4)
5) Germ cell mutagenicity (Chap.3.5)
6) Carcinogenicity (Chap.3.6)
7) Reproductive toxicity (Chap.3.7)
8) Specific target organ toxicity-single exposure (Chap.3.8) → **STOT SE**
9) Specific target organ toxicity-repeated exposure (Chap.3.9) → **STOT RE**
10) Aspiration hazards (Chap.3.10)

NOTICE: ***Health Hazard Classes*** *are relevant for the risk assessment related to* ***Human Health***

ENVIRONMENTAL HAZARDS

1. Hazardous to the aquatic environment (Chap.4.1)

2. Hazardous to the ozone layer (Chap.4.2)

Acute Chronic

GUIDANCE ON THE INTERPRETATION OF THE BB APPROACH

- In the BB approach hazard classes and categories are always optional.
  - ✓ Hazard classes are building blocks (Competent Authorities may decide which hazard classes they apply);
  - ✓ Within a hazard class, each hazard category can be seen as a building block (for a given hazard class, CAs have the possibility not to apply all categories);
  - ✓ Where a CA adopts a hazard category, it should also adopt all the categories for higher hazard levels in that class;
  - ✓ NO change of criteria for classes/categories taken up.
- If a class or category is chosen then hazard communication shall be applied in accordance with GHS.

EU CLP vs GHS

- ✓ EU CLP Regulation adopted all hazard classes of GHS but not all the categories

Acute Oral Toxicity

EU 67/548	**VERY TOXIC** R 28 Very Toxic if swallowed **< 25 mg/kg**		**TOXIC** R 25 Toxic if swallowed **25 - 200 mg/kg**		**HARMFUL** R 22 Harmful if swallowed **200 - 2000 mg/kg**	
LD_{50} mg/kg	**5 - 25**		**25 - 50**	**50 - 200**	**200 - 300**	**300 - 2000**
CLP/ GHS	**Category 1**	**Category 2**		**Category 3**	**Category 4**	**No pictogram Category 5 - optional**
	< 5 mg/kg	**5 - 50 mg/kg**		**50 - 300 mg/kg**	**300 - 2000 mg/kg**	**2000 - 5000 mg/kg**

- ✓ It retains elements which are part of the EU system but which are not (yet) included in the GHS:

e.g. "Contact with water liberates toxic gas"

INDEX

- Introduction
- GHS and classification
- CLP Regulation: general issues
- Hazard classes and categories
- Classification of mixtures
- Labelling and elements for labelling
- CLP and Transport of Dangerous Goods (TDG)

WHAT ABOUT MIXTURES ?!

- ✓ CLP provides for a number of different approaches that may be used to classify a mixture
- ✓ It is important to choose the most appropriate method for the mixture in relation to each hazard class or category
- ✓ This will depend upon the type of hazard to be assessed (physical, health or environmental) and upon the sort of information that is available

CLASSIFICATION OF MIXTURES

Tiered approach:

1. If tests performed directly on the mixture are available, they must be used
2. If such tests are not available, the so-called "bridging principles" can be applied (*not for physical hazards*)
3. If tests performed directly on the mixture are not available and bridging principles are not applicable, class-specific methods can be adopted

e.g. *Classification based on ingredients by additivity formula for acute toxicity*

$$ATE_{mix} = \frac{100}{\sum_{n} \frac{C_i}{ATE_i}}$$

ATE = *Acute Toxicity Extimate*

C_i = *Concentration of ingredient i*

BRIDGING PRINCIPLES (1)

What are the "bridging principles" ??

- ✓ They are rules that "allow characterisation of the hazards of the mixture without performing tests on it, but rather by building on the available information on similar tested mixtures"
- ✓ Not all of the bridging principles need to be applied when assessing a particular health or environmental hazard. It is necessary to consult the CLP Regulation before undertaking any of these assessments.
- ✓ The bridging principles cannot be applied to physical hazards

BRIDGING PRINCIPLES (2)

- Dilution: If a mixture is diluted with a diluent that has an equivalent or lower toxicity, then the hazards of the new mixture are assumed to be equivalent to the original.
- Batching: If a batch of a complex substance is produced under a controlled process, then the hazards of the new batch are assumed to be equivalent to the previous batches.
- Concentration of Highly Toxic Mixtures: If a mixture is severely hazardous, then a concentrated mixture is also assumed to be severely hazardous
- Interpolation within One Toxic Category: Mixtures having component concentrations within a range where the hazards are known are assumed to have those known hazards.
- Substantially Similar Mixtures: Slight changes in the concentrations of components are not expected to change the hazards of a mixture and substitutions involving toxicologically similar components are not expected to change the hazards of a mixture
- Aerosols: An aerosol form of a mixture is assumed to have the same hazards as the tested, non-aerosolized form of the mixture unless the propellant affects the hazards upon spraying.

INDEX

- Introduction
- GHS and classification
- CLP Regulation: general issues
- Hazard classes and categories
- Classification of mixtures
- Labelling and elements for labelling
- CLP and Transport of Dangerous Goods (TDG)

PRODUITS CHIMIQUES

L'ÉTIQUETAGE ÉVOLUE

INRS Institut national de recherche et de sécurité pour la prévention des accidents du travail et des maladies professionnelles

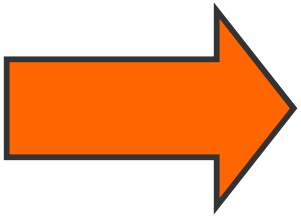
Centro Internazionale per gli Antiparassitari e la Prevenzione Sanitaria
International Centre for Pesticides and Health Risk Prevention (ICPS)

Ospedale Luigi Sacco
POLO UNIVERSITARIO

Sistema Socio Sanitario
Regione Lombardia
ASST Fatebenefratelli Sacco

HAZARD COMMUNICATION

Hazard communication

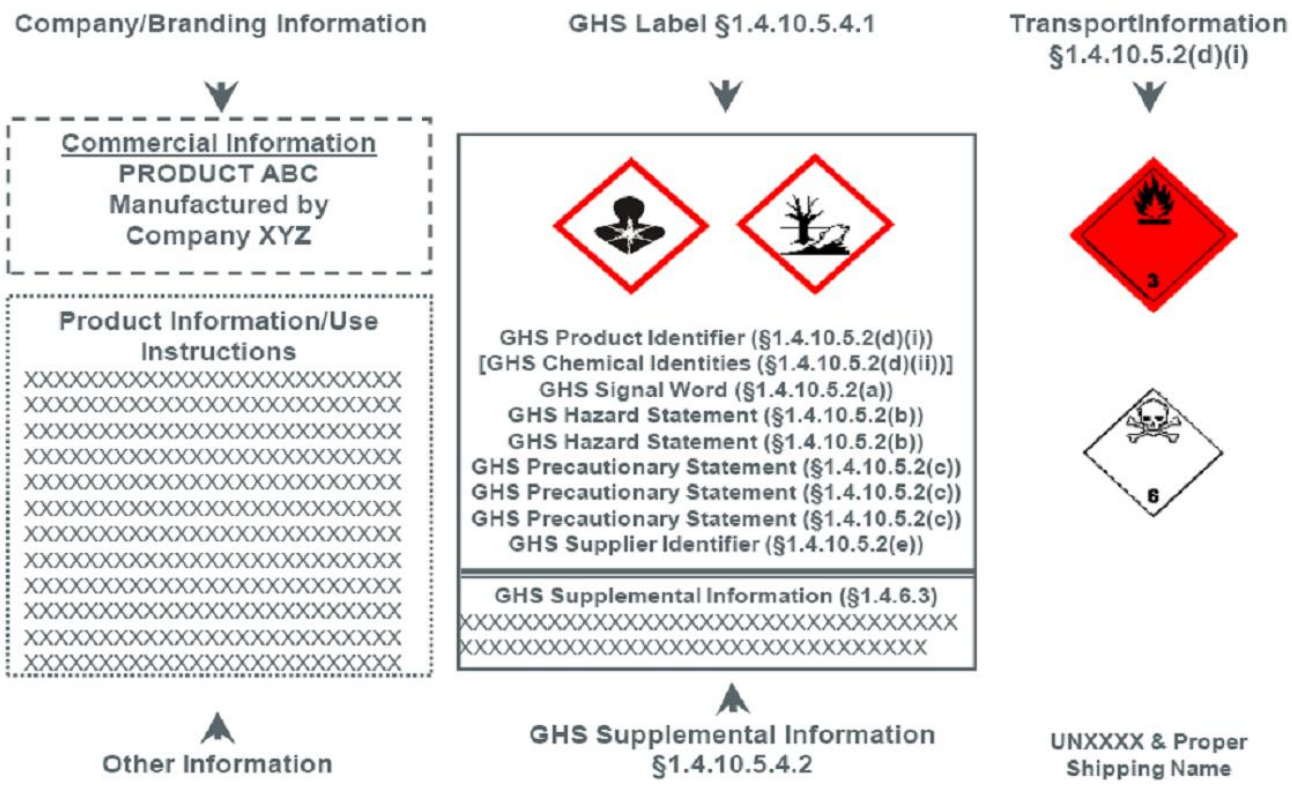


Label

Safety Data Sheet (SDS)

- ✓ **Hazard pictogram** means a graphical composition that includes a symbol plus other graphic elements, such as a border, background pattern or colour that is intended to convey specific information.
- ✓ **Hazard statement** means a phrase assigned to a hazard class and category that describes the nature of the hazards of a hazardous substance or mixture, including, where appropriate, the degree of hazard.

LABELLING



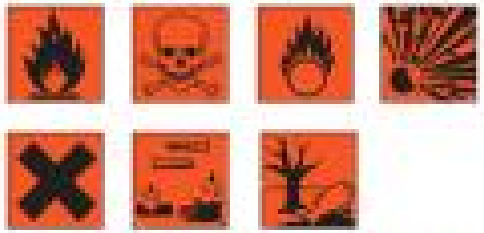
Label means an appropriate group of written, printed or graphic information elements concerning a hazardous substances or mixture, selected as relevant to the target sector(s), that is affixed to, printed on, or attached to the immediate container of a hazardous substance or mixture, or to the outside packaging of a hazardous substances or mixture.

LABELLING IN EU IS CHANGING

PREVIOUS LEGISLATION

Indication of danger

Explosive, Extremely/very flammable, Oxidising,
Very toxic/toxic, Corrosive, Harmful/irritating,
Dangerous for the environment



Danger Symbols

Risk Phrases

Safety Phrases

CLP Regulation

Signal Word
Danger/Warning

Hazard Pictograms

Hazard Statements
(e.g. H300, H330)

Precautionary Statements
(e.g. P305, P310)

OLD			NEW			
Symbols		Description	GHS-Symbols		Description	Hazard statement examples
	E	Explosive		GHS01	Exploding bomb	Explodes due to fire, shock, friction or heat; danger due to fire, blast and projectiles.
	F+ F	Extremely flammable Highly flammable		GHS02	Flame	Flammable; catches fire spontaneously if exposed to air; in contact with water releases flammable gases which may ignite spontaneously.
	O	Oxidizing		GHS03	Flame over circle	May cause fire or explosion; strong oxidizer.
No equivalent				GHS04	Gas cylinder	Contains gas under pressure; may explode if heated; contains refrigerated gas; may cause cryogenic burns or injury.
	C	Corrosive		GHS05	Corrosion	May be corrosive to metals; causes severe skin burns and eye damage.
	T+ T	Very toxic Toxic		GHS06	Skull and crossbones	Small quantities are harmful or fatal.
	Xn	Harmful	No direct equivalent			
	Xi	Irritant				
No equivalent				GHS07	Exclamation mark	Harmful, irritates eyes, skin or respiratory system; large quantities are fatal.
No direct equivalent				GHS08	Health hazard	Causes allergic reactions; may cause cancer, may cause genetic defects; may damage fertility or the unborn child; causes damage to organs.
	N	Dangerous for the environment		GHS09	Environment	Harmful, toxic or very toxic to aquatic life with long lasting effects.

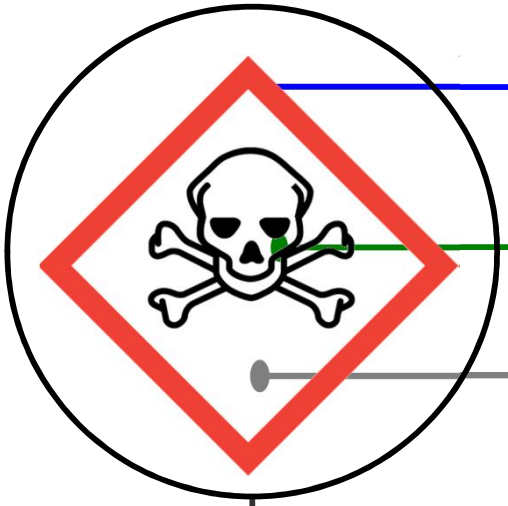
CLP AND MAIN HAZARD COMMUNICATION ELEMENTS

The key elements to be included in labels should be:

- hazard pictograms
- signal words
- hazard statements
- precautionary statements.

HAZARD PICTOGRAMS

PICTOGRAMS



Frame (red)

Symbol (black)

Background (white)

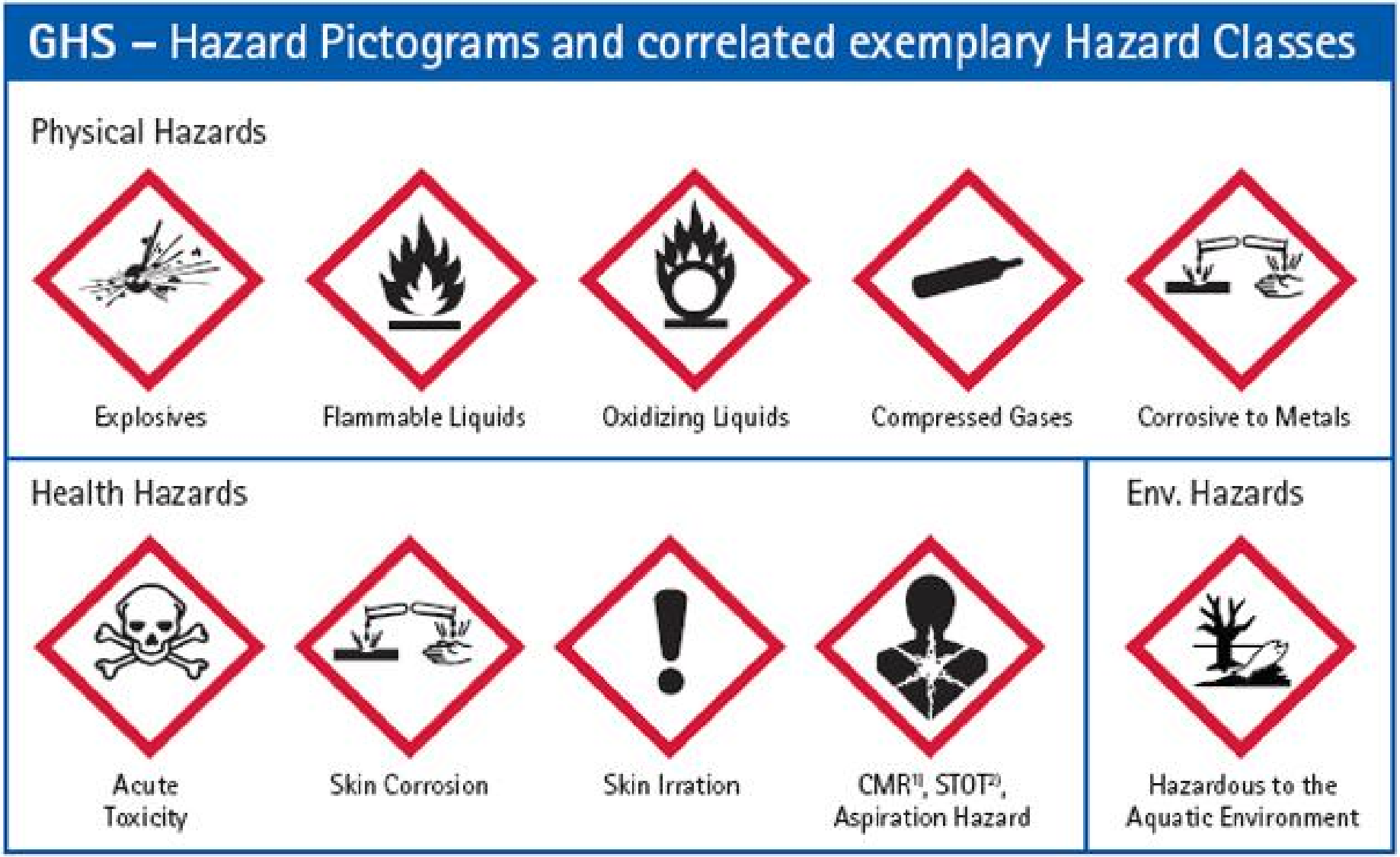
Shape (a square set at a point)

SIGNAL WORDS

DANGER (for more severe hazard categories)

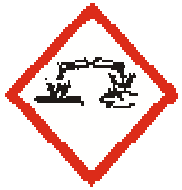
WARNING (for less severe hazard categories)

HAZARD PICTOGRAMS AND CLASSES



1) carcinogenic, germ cell mutagenic, toxic to reproduction / 2) specific target organ toxicity

PHYSICAL HAZARDS

Pictogram	Symbol		Main Hazard Classes
GHS01		exploding bomb	**Explosives; Self Reactives; Organic Peroxides.**
GHS02		flame	**Flammables; Self Reactives; Pyrophorics; Self-Heating; Emits Flammable Gas; Organic Peroxides**
GHS03		flame over circle	**Oxidizers**
GHS04		gas cylinder	**Gases Under Pressure**
GHS05		corrosion	**Corrosives**

HEALTH HAZARDS

Pictogram	Symbol		Main Hazard Classes
GHS05		corrosion	**Corrosives**
GHS06		skull and crossbones	**Acute toxicity (severe)**
GHS07		exclamation mark	**Irritant; Dermal Sensitizer; Acute toxicity (harmful); Narcotic Effects; Respiratory Tract; Irritation**
GHS08		health hazard	**Carcinogen; Respiratory Sensitizer; Reproductive Toxicity; Target Organ Toxicity; Mutagenicity; Aspiration Toxicity**

ENVIRONMENTAL HAZARDS

Pictogram	Symbol		Main Hazard Classes
GHS09		environment	**Hazardous to the aquatic environment**
GHS07		exclamation mark	**Hazardous to the ozone layer**

HAZARD STATEMENTS

- ✓ Hazard Statements are phrases assigned to hazard classes and categories describing the nature and, if appropriate, the degree of the hazards.
- ✓ Hazard Statements are assigned a unique alphanumerical code which consists of a letter "**H**" and three numbers, as follows:
  - ✓ One number (the first) designating the type of hazard
  - ✓ Two numbers corresponding to a sequential numbering arising from the intrinsic properties of the substance/mixture

Hazard Statements (H)	
H2...	Physical Hazards
H3...	Health Hazards
H4...	Environmental Hazards

- ✓ All Hazard Statements resulting from the classification shall appear on the label, unless there is evident duplication or redundancy. The list of Hazard Statements is in Annex III to the CLP Reg.
- ✓ CLP Regulation provides for some supplemental hazard information identified by an "**EUH**" + three numbers.

PRECAUTIONARY STATEMENTS

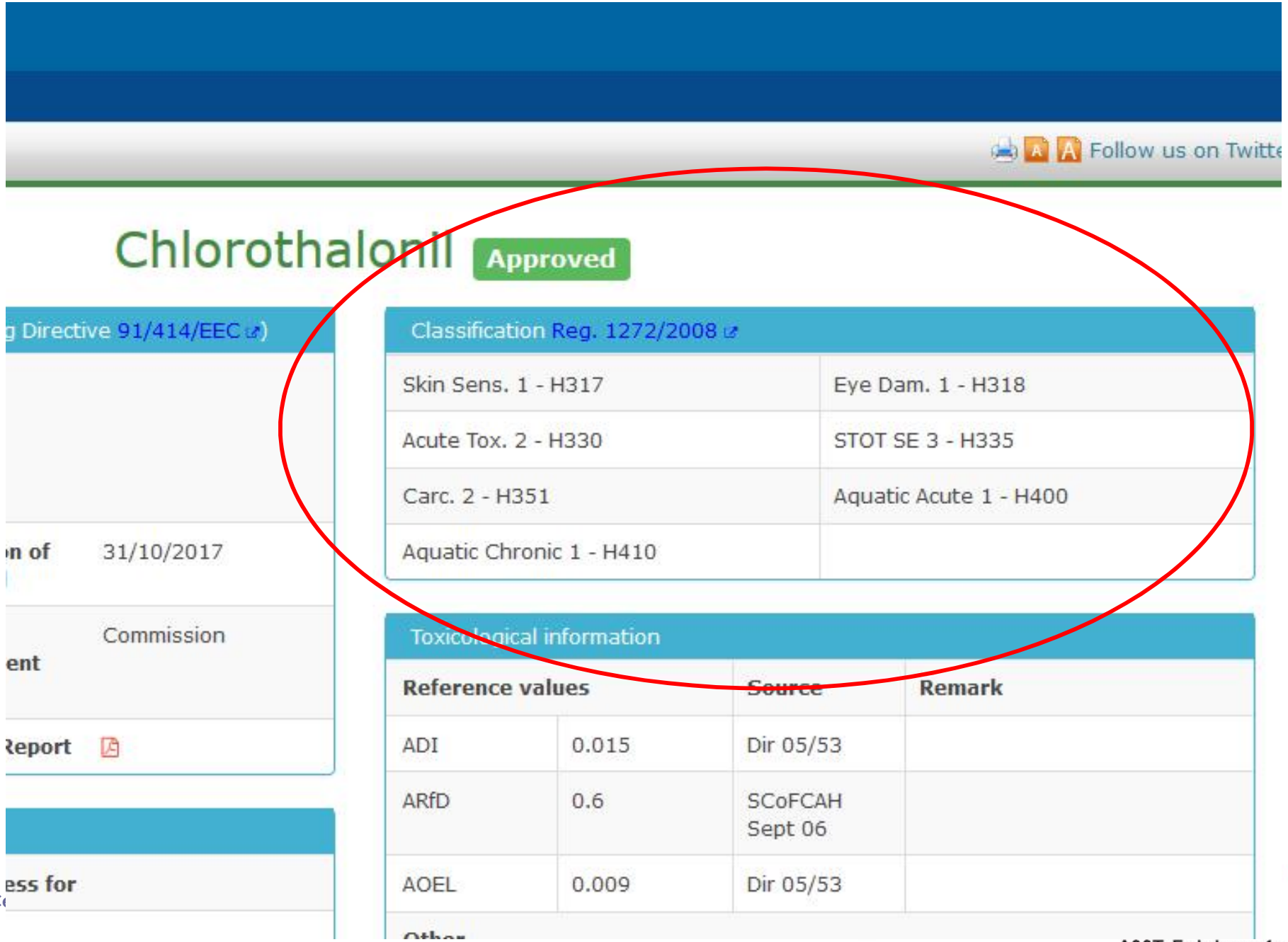
- ✓ Precautionary Statements are phrases describing recommended measure(s) to minimise or prevent adverse effects resulting from exposure to a hazardous product, or from improper storage or handling.
- ✓ They are assigned a unique alphanumerical code which consists of the letter "**P**" and three numbers, as follows:
  - One number (the first) designating the type of statement (*see table below*)
  - Two numbers corresponding to the sequential numbering

Precautionary Statements (P)	
P1 # #	General
P2 # #	Prevention
P3 # #	Response
P4 # #	Storage
P5 # #	Disposal

PRECAUTIONARY STATEMENTS

- ✓ Not more than 6 precautionary statements shall appear on the label, unless necessary to reflect the nature and the severity of the hazards.
- ✓ Precautionary Statements redundant or unnecessary shall be omitted from the label.
- ✓ If the substance or mixture is supplied to the general public, one precautionary statement addressing the disposal shall appear on the label.
- ✓ The list of Precautionary Statements is in Annex IV to CLP Regulation.
- ✓ Note: the development of guidance on the selection of PSs is still ongoing at UN level.

Chlorothanolil - example



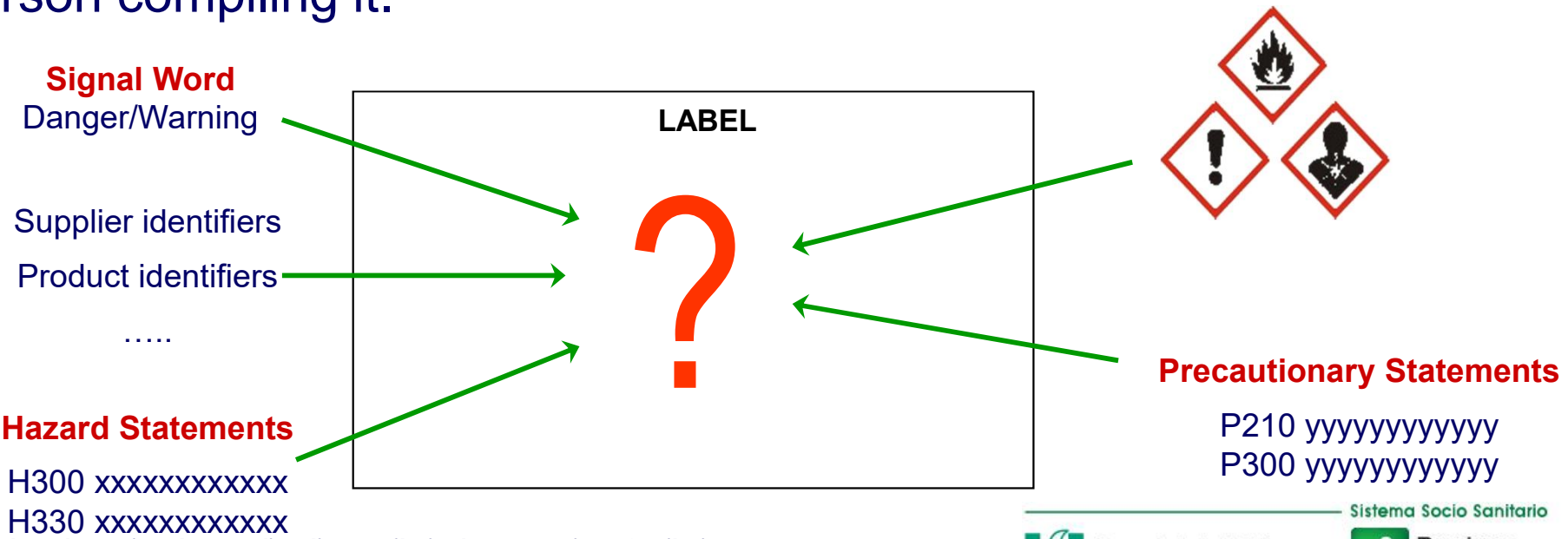
LABELLING REQUIREMENTS UNDER CLP

If your substance or mixture requires labelling and is contained in packaging, it should be labelled with the following information:

- ✓ the name, address and telephone number of the supplier/s;
- ✓ the nominal quantity of the substance or mixture, unless this quantity is specified elsewhere on the package;
- ✓ product identifiers;
- ✓ hazard pictograms;
- ✓ signal word;
- ✓ hazard statements;
- ✓ appropriate precautionary statements;
- ✓ supplemental information.

LABELLING REQUIREMENTS UNDER CLP

- ✓ CLP introduces several new aspects to the labelling (e.g. *the shape of pictograms, number of labelling elements respect to previous legislation*)
- ✓ Pictograms, signal word, statements must be located together
- ✓ Nevertheless, no further requirement is provided for the arrangement of labelling elements
- ✓ So the actual arrangement of the label is left to the discretion of the person compiling it.



LABELLING REQUIREMENTS UNDER CLP

Signal word

Danger/Attention

LABEL

Supplier identifiers

Product identifiers

.....

?

Hazard Statements

H300 xxxxxxxxxxxx

H330 xxxxxxxxxxxx

Precautionary Statements

P210 yyyyyyyyyyyy

P300 yyyyyyyyyyyy

LABELLING OF PPP IN EU

COMMISSION REGULATION (EU) No 547/2011

of 8 June 2011

implementing Regulation (EC) No 1107/2009 of the European Parliament and of the Council as regards labelling requirements for plant protection products

(Text with EEA relevance)

Article 1

The labelling of plant protection products shall comply with the requirements, as set out in Annex I, and contain, where approriate, the standard phrases for special risks to human or animal health or to the environment, as set out in Annex II, and the standard phrases for safety precautions for the protection of human or animal health or of the environment, as set out in Annex III

ANNEX I

LABELLING REQUIREMENTS AS REFERRED TO IN ARTICLE 1

(1) The following information shall be included clearly and indelibly on the packaging of plant protection products:

Typical PPP LABEL in Italy

NOME

Classe funzionale
Tipo di formulazione

Composizione:
Sostanza attiva (g/l)
Coformulanti pericolosi

INDICAZIONI DI PERICOLO:

CONSIGLI DI PRUDENZA

Titolare della Registrazione
(nome, indirizzo, **n.telef.**)

Stabilimenti di produzione

Registrazione Ministero della Salute n. … del…

Contenuto: ml … opp. kg …
Partita n. …

PRESCRIZIONI PARTICOLARI: (norme precauzionali e ambientali, rispetto di *buffer zone*)

INFORMAZIONI MEDICHE:
Sintomi
Terapia
Consultare un Centro Antiveleni

CARATTERISTICHE:
(modalità d'azione del prodotto)

EPOCHE, DOSI E MODALITA' D'IMPIEGO
in tabella

Coltura	Patogeno/avversità combattute	Dose	Indicazioni di impiego

COMPATIBILITA': (= incompatibilità accertate, eventuale miscelazione)

AVVERTENZA: in caso di miscela con altri formulati deve essere rispettato il periodo di carenza più lungo. Devono inoltre essere osservate le norme precauzionali prescritte per i prodotti più tossici. Qualora si verificassero casi di intossicazione informare il medico della miscelazione compiuta.

FITOTOSSICITA':
AVVERTENZA:

INTERVALLO DI SICUREZZA:

PRESCRIZIONI SUPPLEMENTARI
ATTENZIONE:
(frasi tipo sui rischi particolari e quelle relative alle precauzioni da prendere per l'uomo e per l'ambiente)

Da impiegarsi esclusivamente per gli usi e alle condizioni riportate in questa etichetta.
Chi impiega il prodotto è responsabile degli eventuali danni derivanti da uso improprio del preparato.
Il rispetto di tutte le indicazioni contenute nella presente etichetta è condizione essenziale per assicurare l'efficacia del trattamento e per evitare danni alle piante, alle persone e agli animali.
Non applicare con i mezzi aerei.
Per evitare rischi per l'uomo e per l'ambiente seguire le istruzioni per l'uso.
Operare in assenza di vento.
Da non vendersi sfuso.
Smaltire le confezioni secondo le norme vigenti.
Il contenitore completamente svuotato non deve essere disperso nell'ambiente.
Il contenitore non può essere riutilizzato.
Non contaminare altre colture, alimenti e bevande o corsi d'acqua

Non contaminare l'acqua con il prodotto o il suo contenitore. Non pulire il materiale d'applicazione in prossimità delle acque di superficie. Evitare la contaminazione attraverso i sistemi di scolo delle acque dalle aziende agricole e dalle strade.

ed. Ott. -2011

Etichetta autorizzata con decreto dirigenziale del…..


Produits chimiques
l'étiquetage évolue
j'ouvre l'œil
PRODUITS CHIMIQUES
L'ÉTIQUETAGE ÉVOLUE
inrs

LABELLING AND CHANGES

Example of Plant Protection Product

FITOX

Insetticida/acaricida per melo, pero, pesco e nettarine ed alcune orticole
Sospensione concentrata

Composizione
100 g di prodotto contengono:

abamectina	g	1,71 (18 g/l)
chlorantraniliprole	g	4,29 (45 g/l)
coformulanti q.b. a	g	100

NOCIVO

FRASI DI RISCHIO
Nocivo per inalazione e ingestione.
Nocivo: pericolo di gravi danni alla salute in caso di esposizione prolungata per inalazione e ingestione

PERICOLOSO PER L'AMBIENTE

Altamente tossico per gli organismi acquatici, può provocare a lungo termine effetti negativi per l'ambiente acquatico

CONSIGLI DI PRUDENZA - Conservare fuori della portata dei bambini. Conservare lontano da alimenti o mangimi e da bevande. Non mangiare, né bere, né fumare durante l'impiego. Non gettare i residui nelle fognature. In caso d'ingestione consultare immediatamente il medico e mostrargli il contenitore o l'etichetta. Questo materiale e/o il suo contenitore devono essere smaltiti come rifiuti pericolosi. Non disperdere nell'ambiente. Riferirsi alle istruzioni speciali/schede informative in materia di sicurezza.

DPD

FITOX

Insetticida/acaricida per melo, pero, pesco e nettarine ed alcune orticole
Sospensione concentrata

Composizione
100 g di prodotto contengono:

abamectina	g	1,71 (18 g/l)
chlorantraniliprole	g	4,29 (45 g/l)
coformulanti q.b. a	g	100

ATTENZIONE

INDICAZIONI DI PERICOLO • Nocivo se ingerito. Nocivo se inalato. Può provocare danni agli organi in caso di esposizione prolungata o ripetuta. Molto tossico per gli organismi acquatici con effetti di lunga durata. Per evitare rischi per la salute umana e per l'ambiente, seguire le istruzioni per l'uso.

CONSIGLI DI PRUDENZA • Tenere fuori dalla portata dei bambini. Non respirare la polvere/i fumi/i gas/la nebbia/i vapori/gli aerosol. Non mangiare, né bere, né fumare durante l'uso. Utilizzare soltanto all'aperto o in luogo ben ventilato. In caso di inalazione: trasportare l'infortunato all'aria aperta e mantenerlo a riposo in posizione che favorisca la respirazione. In caso di malessere, contattare un CENTRO ANTIVELENI o un medico. Raccogliere il materiale fuoriuscito. Smaltire il prodotto/recipiente in conformità alla normativa vigente.

Signal word

Pictograms

Hazard Statements

EUH401

Precautionary Statements

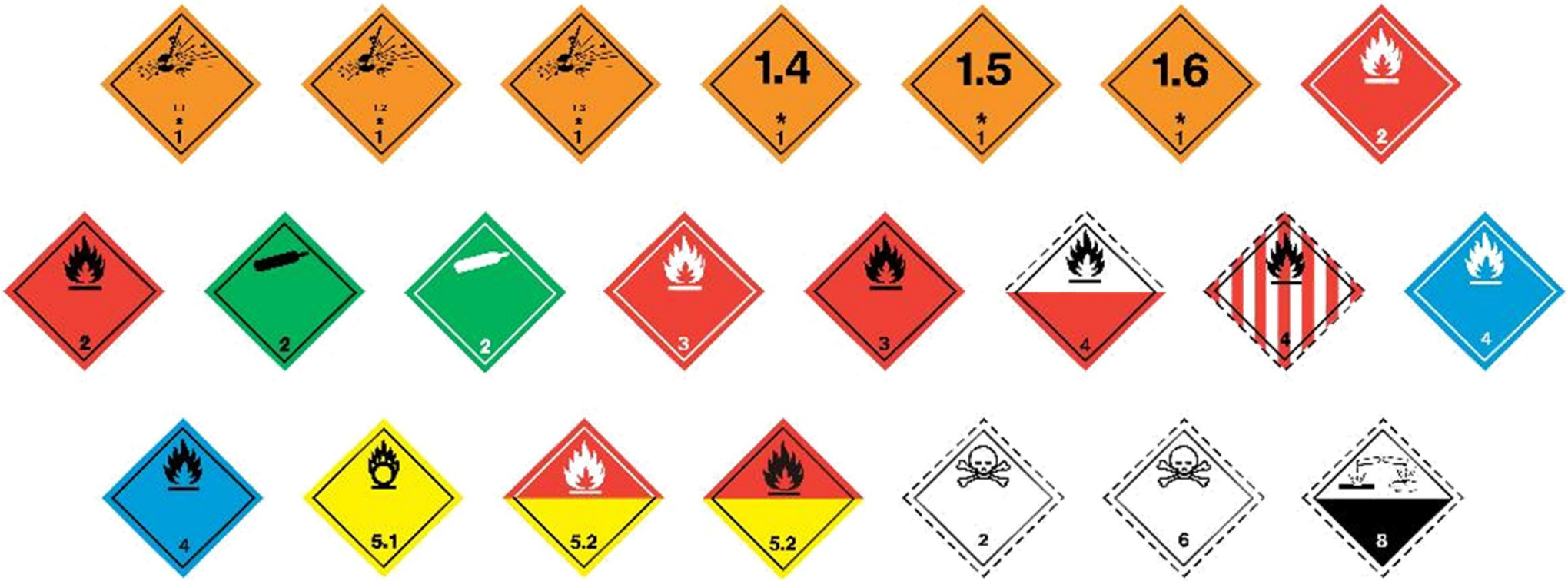
CLP

Fonte immagine: "Da DPD a CLP - Cosa è cambiato nella regolamentazione degli agrofarmaci" – www.syngenta.it

INDEX

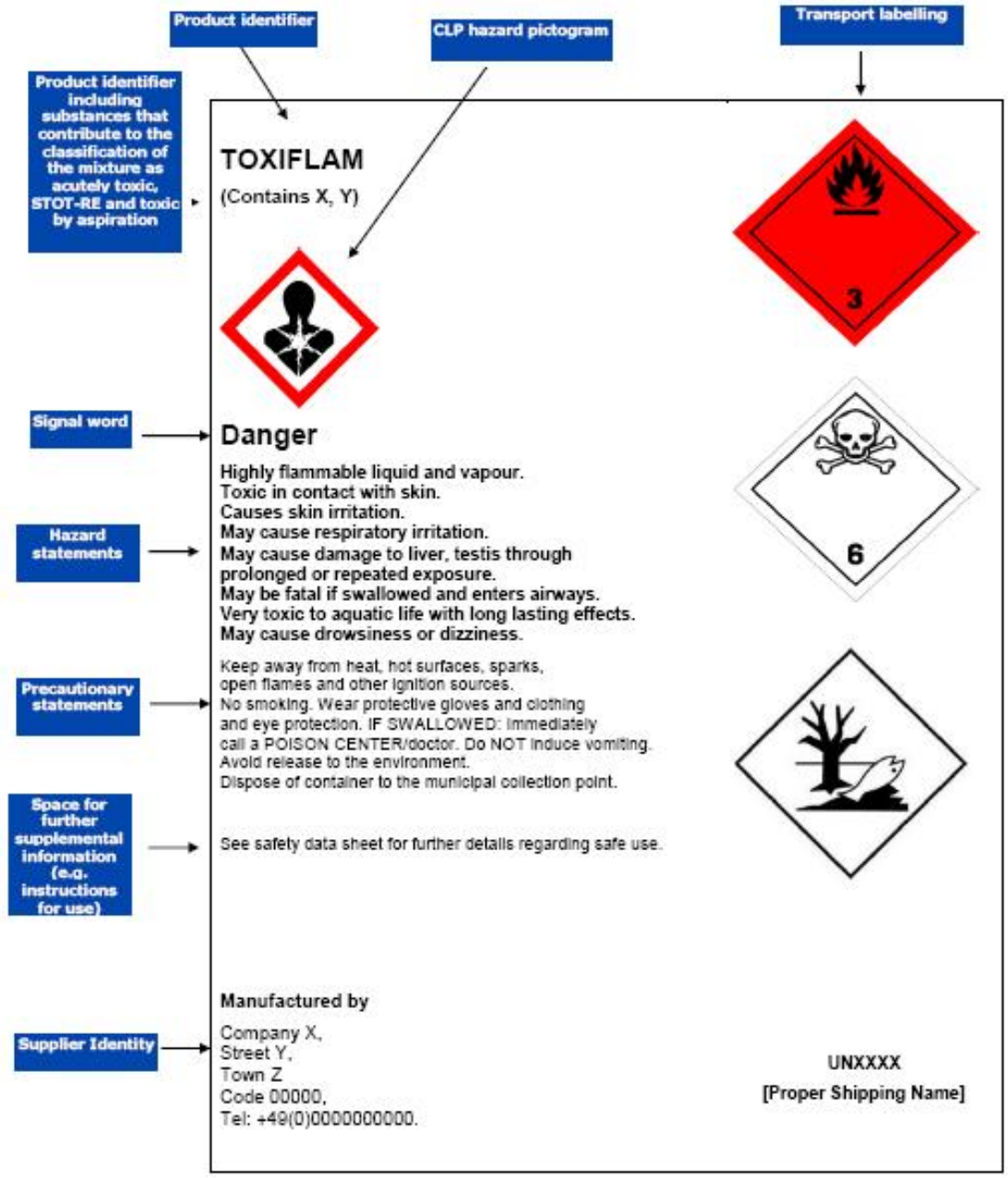
- Introduction
- GHS and classification
- CLP Regulation: general issues
- Hazard classes and categories
- Classification of mixtures
- Labelling and elements for labelling
- CLP and Transport of Dangerous Goods (TDG)

PICTOGRAMS FOR TDG
(Transport of Dangerous Goods)



PICTOGRAMS FOR SUPPLY & USE

SUPPLY AND TRANSPORT LABEL



SINGLE PACKAGE

- ✓ If the pictogram for the transport appears on the label, then the corresponding provided by the CLP is omitted
- ✓ label for only marketing is NEVER valid also for the transport
- ✓ the label for the transport, on the other hand, may be valid for the marketing.

Ref: "Guidance on labelling and packaging in accordance with Regulation (EC) No 1272/2008" – ECHA-16-G-05-EN

GUIDANCE AND REFERENCES

https://echa.europa.eu/guidance-documents/guidance-on-clp

Guidance for implementation of CLP Regulation are available on the website of European Chemical Agency (ECHA): https://echa.europa.eu/home

- ***Introductory Guidance on the CLP Regulation***
- ***Guidance on the Application of the CLP Criteria***
- ***Guidance on the Application of the CLP Criteria***
- ***Guidance on labelling and packaging in accordance with Regulation (EC) 1272/2008***

…and other (leaflets, practical guides, Q&As and FAQs, Guidance in a nutshell, etc.)

REGULATION (EC) No. 1272/2008 (CLP)
https://echa.europa.eu/regulations/clp/legislation

UNECE WEBSITE ON GHS
http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html

"I read all package labels for my health. Now my eyes are shot!"

Thank you!

Questions?!

Gaetano Garramone
gaetano.garramone@icps.it.it

Centro Internazionale per gli Antiparassitari e la Prevenzione Sanitaria
International Centre for Pesticides and Health Risk Prevention (ICPS)

Sistema Socio Sanitario
Ospedale Luigi Sacco
POLO UNIVERSITARIO
Regione Lombardia
ASST Fatebenefratelli Sacco