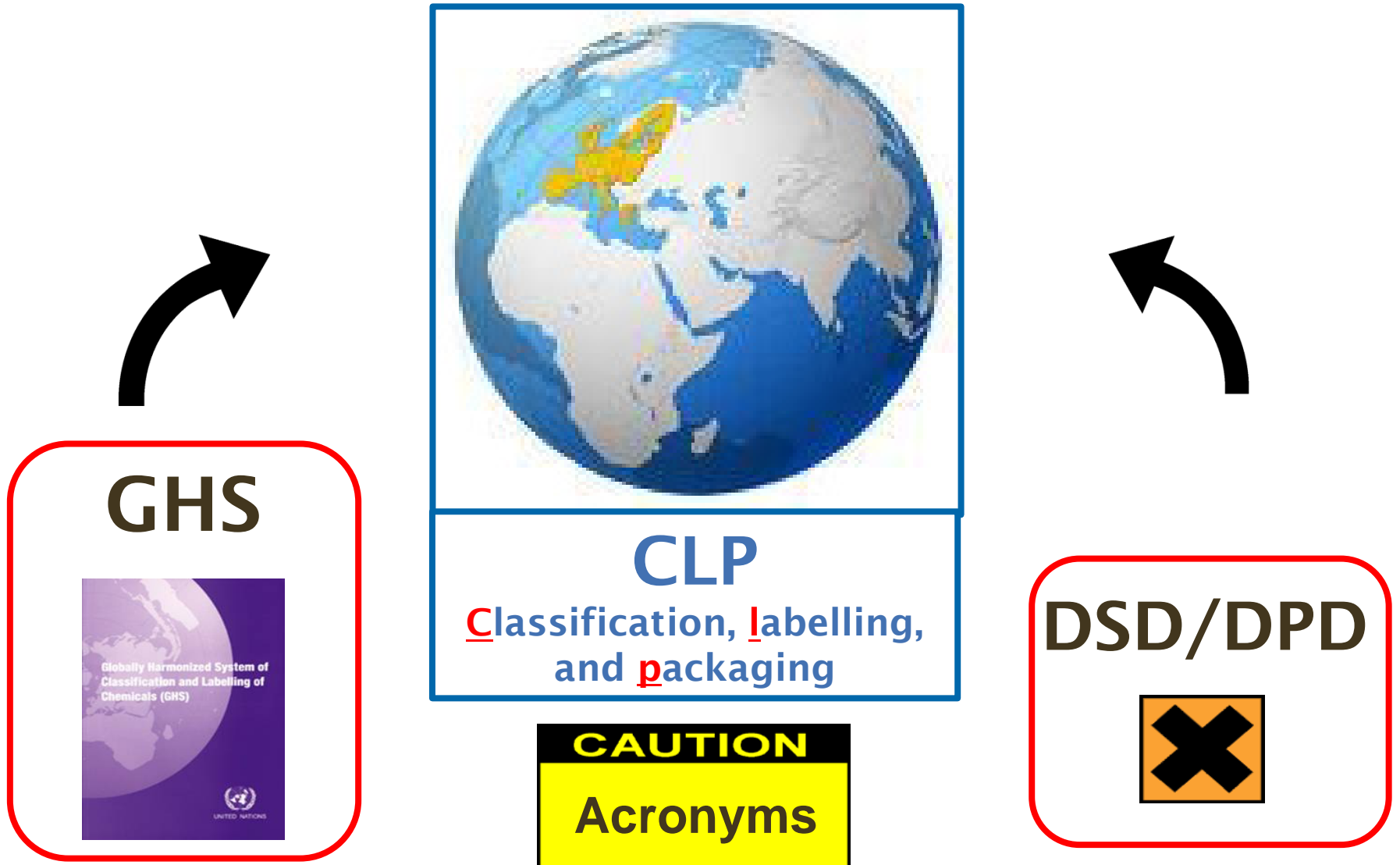


CLP: Transitioning to 2015

Dr. Candace Prusiewicz
ICF International
17 November 2011

CLP Origins



Classification and Labelling System Comparison



C&L System	DSD/DPD Old EU System	CLP New EU System	GHS New Global System
Acronym Identity	Dangerous Substance Directive and Dangerous Preparations Directive	Classification, Labelling, and Packaging of substances and mixtures	Globally Harmonized System
Important Dates	Phased out 1 June 2015	Fully implemented 1 June 2011 2 nd Adaptation to Technical Progress (ATP) 19 April 2011 Aligned with GHS Rev. 3 (2009)	GHS Rev. 4 8 September 2011
Legal implications	Legally binding and enforceable		Not legally binding
Transition period classifications	Dual classifications during the transition (with national legislation)		N/A
Hazard Communication	Orange EU Pictograms Signal words “R” and “S” Phrases	Universal pictograms Signal words “P” and “H” Phrases	
Classification	<u>Classifications under CLP may be different from classifications under DSD/DPD and GHS</u>		

CLP Timeline



REACH Timeline	Substances and Mixtures		Registration for ≥ 1000 tonnes/yr or SVHC		Registration for ≥100 tonnes/yr			Registration for ≥1 tonne/yr				REACH Fully Implemented	
			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 onwards
CLP Timeline	Substances		Classified, labelled, and packaged under DSD. If CLP is applied, DSD labelling and packaging not required		Classified under BOTH DSD and CLP (includes SDS) Labelled and packaged only under CLP			CLP Fully Implemented Classified, labelled, and packaged under CLP					
	Mixtures		Classified, labelled, and packaged under DPD OR classified under BOTH DPD and CLP (includes SDS) Labelled and packaged only under CLP										


3 January 2011
CLP Notification Deadline for Substances


1 June 2015
CLP Obligation Deadline for Mixtures

Adapted from: http://guidance.echa.europa.eu/docs/guidance_document/clp_introduutory_en.pdf

What steps are involved in the classification process?



1. Identify your role and obligations under CLP
2. Identify substances and/or mixtures requiring evaluation for classification under CLP or REACH
3. Compile and evaluate appropriate data
4. Classify for specific hazards according to CLP criteria
5. Notify ECHA as appropriate
6. Update SDSs and labels as appropriate

Roles under CLP

Role	Definition
Manufacturer	“Produces or extracts a substance in the natural state within the Community”
Importer	Physically introduces the substance/mixture into the “customs territory of the Community”
Downstream User ¹	“Uses the substance/mixture, either on its own or in a mixture, in the course of his industrial or professional activities”
Distributor ²	“Stores and places on the market the substance/mixture for third parties”
Producer of Articles ³	“Makes or assembles an article within the Community; where an article means an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition”

¹ Includes formulator /re-importer

² Includes retailers

³ Specifically refers to explosive articles for CLP

Obligations under CLP depend on role in Supply Chain



CLP Obligation	Manufacturer	Importer	Downstream User	Distributor	Producer of Articles ³
Classification	X	X	X ¹	X ²	X
Labelling	X	X	X	X	X
Packaging	X	X	X	X	X
Maintain records for 10 years	X	X	X	X	X
Update classification when warranted	X	X	X		X
Update labelling following changes in classification	X	X	X		X
Submit proposal to Competent Authority based on new data/classification	X	X	X		X
Notify C&L Inventory	X	X			

- 1** May use classifications established by another member of the supply chain provided that the composition of the substance /mixture remains unchanged. Need to self-classify if substance /mixture is altered.
- 2** May use classification for substance/mixture established by another member of the supply chain (SDS).
- 3** Explosives

Agency Notification (Article 40)



Classification and Labelling Inventory	<ul style="list-style-type: none"> ▪ Database maintained by ECHA
Who?	<ul style="list-style-type: none"> ▪ Manufacturers ▪ Importers
What ?	<ul style="list-style-type: none"> ▪ Substances subject to registration under REACH (≥ 1 tonne/year) <ul style="list-style-type: none"> ❖ Registration dossier serves as notification ▪ Marketed substances classified as <u>hazardous</u> under CLP regardless of tonnage ▪ Substances classified as <u>hazardous</u> under CLP and included in a marketed mixture above regulated concentration limits (generally $\geq 0.1-1.0\%$) regardless of tonnage ▪ Updated classifications based on new data
How?	<ul style="list-style-type: none"> ▪ Your identity and identity of the substance ▪ CLP classifications (self or harmonized) ▪ Explanation for lack of classifications ▪ Labelling elements, including supplemental hazard statements
When?	<ul style="list-style-type: none"> ▪ 3 January 2011 (substances currently on market) OR ▪ Within one month of placement on the market

Self-Classification



- Do-it-yourself classification
- Data compared against CLP criteria
 - Quantitative
 - Weight of Evidence
 - Expert Judgment
- Translation Tables (Annex VII)
 - Only used in absence of data
 - Minimum translation
- Applicable for mixtures

Harmonised Classification



- Legally-binding (default) EU classification
- Table 3.1 of Annex VI (CLP) provides harmonised classifications (transferred from Annex I of DSD)
- Must be used by all suppliers of the same substance
- Reserved for CMRs (carcinogens, mutagens, reproductive hazards) and respiratory sensitisers moving forward

CAUTION

Acronym

CLP Hazard Classes

Physical Hazard Class



Hazards

- Flammables
 - ❖ *Categories 1, 2, or 3*
 - ❖ *Different physical forms*
- Explosives
- Oxidisers
- Gases under pressure
- Self-reactive substances/mixtures
- Pyrophoric liquids and solids
- Self-heating substances/mixtures
- Substances/mixtures that emit flammable gases after contact with water
- Organic peroxides
- Corrosive to metals

Health Hazard Class



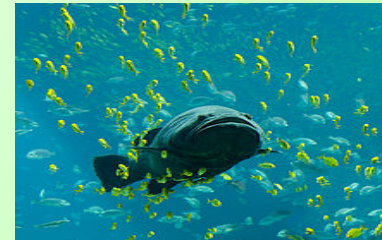
Hazards

- Acute toxicity
 - ❖ *Categories 1, 2, 3 or 4*
 - ❖ *Different routes of exposure*
- Skin corrosion/irritation
- Serious eye damage/ eye irritation
- Respiratory sensitization
- Skin sensitization
- Germ cell mutagenicity
- Reproductive toxicity
- Carcinogenicity
- STOT (specific target organ toxicity- single or repeated exposure)
- Aspiration

CAUTION

Acronym

Environmental Hazard Class



Hazards

- Acute or chronic aquatic environmental hazard
- Hazardous to ozone layer

Methanol Classification Example

Physical Hazard Class



Hazard: Flammability

Category

- Flamm Liq 2

Health Hazard Class



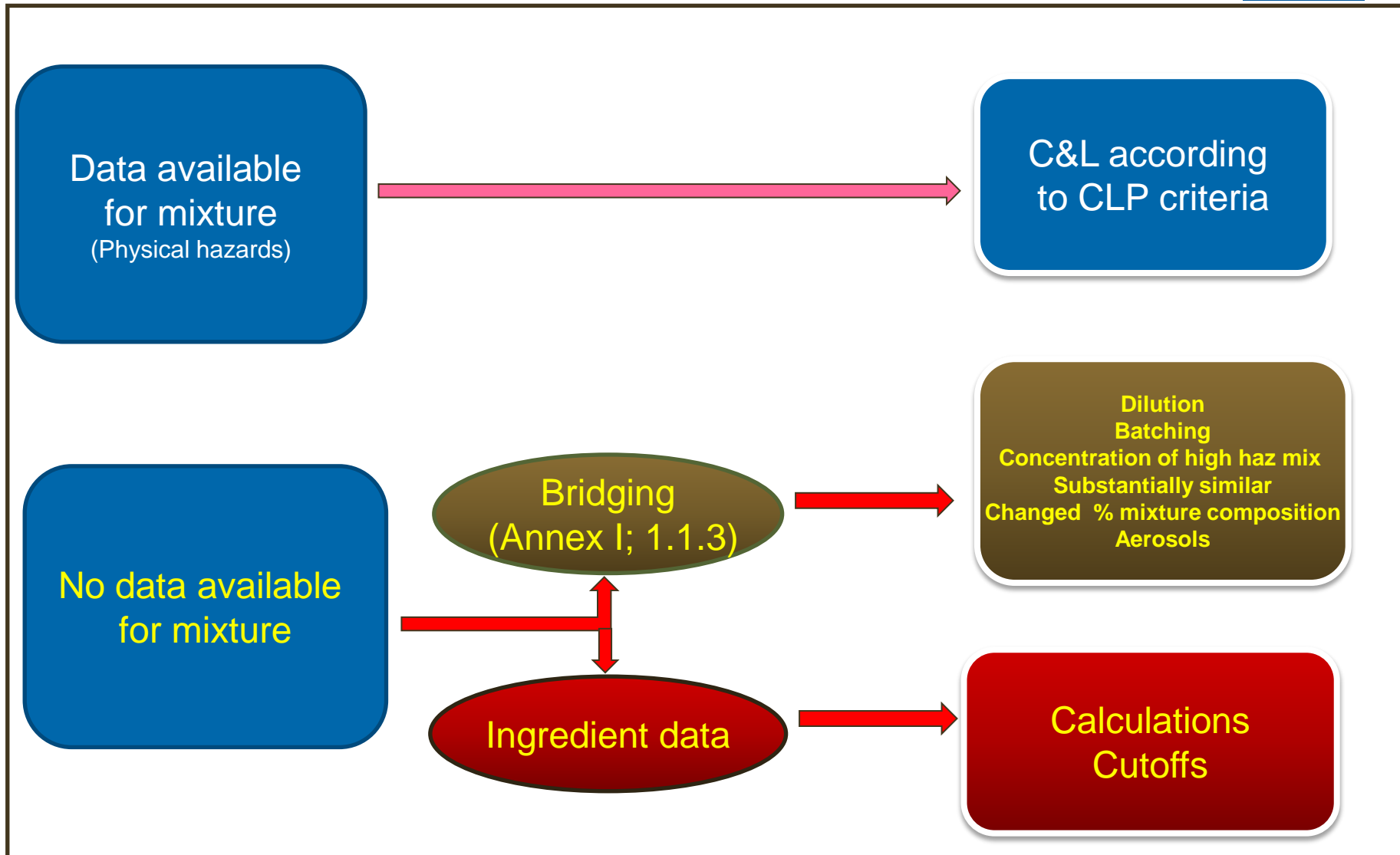
**Hazard : Acute toxicity
and Target Organ Toxicity**

Category

- Acute Tox 3 (Inhalation)
- Acute Tox 3 (Dermal)
- Acute Tox 3 (Oral)
- STOT SE 1
Specific Target Organ Toxicity
(single exposure)

Environmental Hazard Class

Classifying Mixtures



Labelling under CLP

☐ Signal Words

- Only 2: “Danger” and “Warning”

☐ Pictograms

- Only 9 (increased from 7 under DSD)

☐ Hazard and Precautionary Phrases

- “H” and “P” phrases replace “R” and “S” phrases

- Categorized numerically

H200-299 (Physical hazards)

H300-399 (Health hazards)

H400-499 (Environmental hazards)

P100-199 (General)

P200-299 (Prevention)

P300-399 (Response)

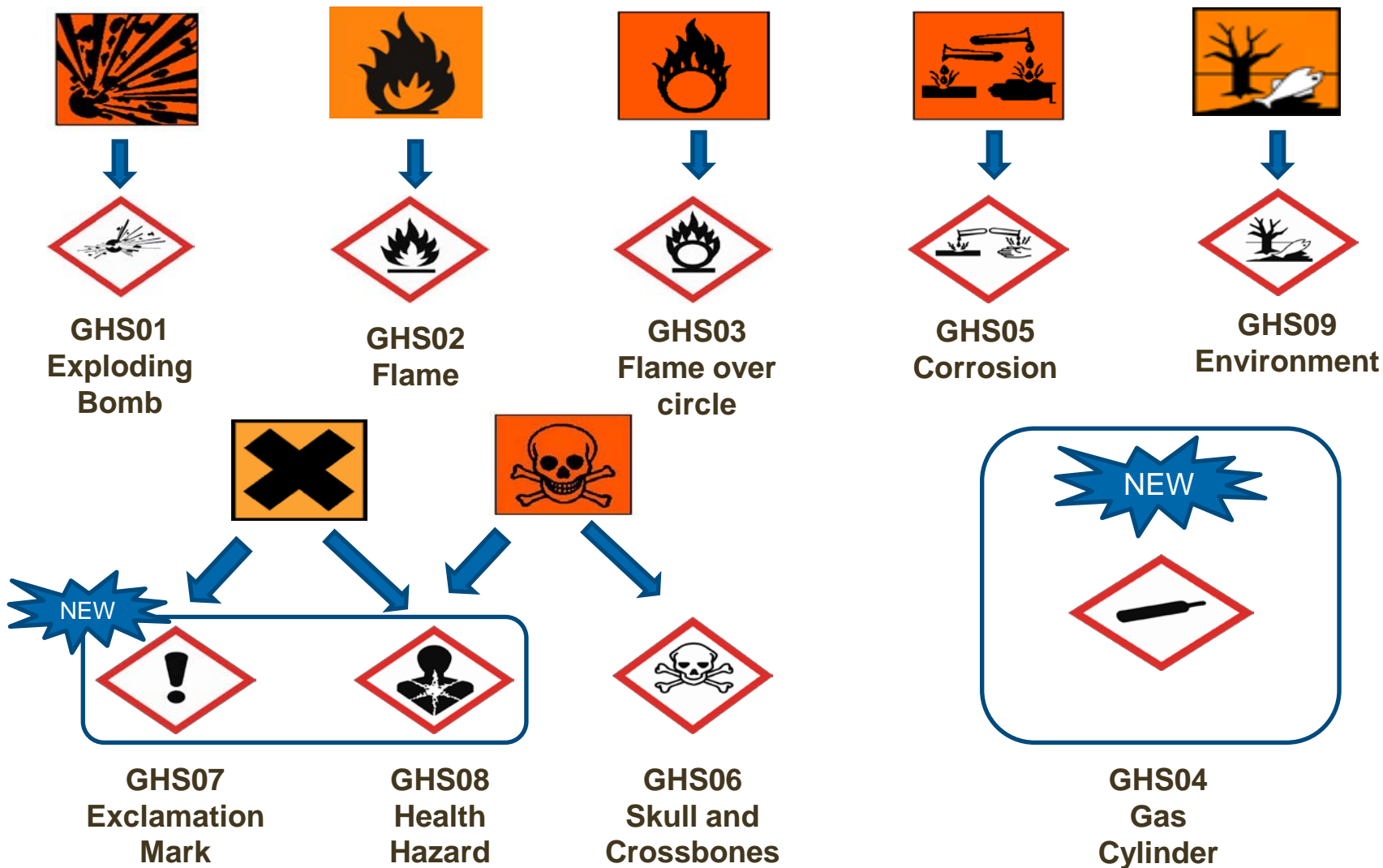
P400-499 (Storage)

P500-599 (Disposal)

- Supplemental phrases (“EUH” phrases) as appropriate

- Rules of precedence

Labelling: DSD, CLP, and GHS Pictograms



Comparison of OLD EU labelling(DSD) and NEW EU labelling(CLP)

Hazard pictograms under CLP



Signal word:

Danger

5 Hazard statements under CLP

Toxic if swallowed or if inhaled⁵

Causes severe skin burns and eye damage

May cause an allergic skin reaction

May cause allergy or asthma symptoms or breathing difficulties if inhaled

Very toxic to aquatic life

Selection from ca. 30 precautionary statements

Danger symbols under DSD



Indications of danger:

Toxic

Dangerous for the environment

4 Risk phrases under DSD

Toxic by inhalation and if swallowed

Causes burns

May cause sensitisation by inhalation and by skin contact

Very toxic to aquatic organisms

S: (1/2-)/26-36/37/39-45-61

Source: http://guidance.echa.europa.eu/docs/guidance_document/clp_labelling_en.pdf

Safety Data Sheets (SDS)



- ❑ Hazard communication tool regulated by REACH (Article 31 of Regulation No. 1907/2006; Annex II is Guide to Compilation)
- ❑ 16 sections (similar to ANSI format)
 - Section 2 (Hazards Identification)
 - Section 16 (Other Information)
- ❑ Must contain hazard classification information under **both** old EU classification (DSD/DPD) and new EU classification (CLP) after 1 December 2010 and until 1 June 2015



Substance SDS Section 2.1



Section 2: Hazard Identification

2.1 Classification

2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)(see SECTION 16 for full text of hazard phrases if not written out in full)

Flamm. Liq 2, H225: Highly flammable liquid and vapour



NEW CLP classification

Aspiration 1, H304: May be fatal if swallowed and enters airways

Aquatic Acute 1, H400: Very toxic to aquatic life (M-Factor(self-classification)=10)



Underlined text optional

2.1.2 Classification according to Directive 67/548/EEC (see SECTION 16 for full text of risk phrases if not written out in full)

R11- Highly flammable



OLD DSD classification

R65- Harmful: may cause lung damage if swallowed

R50/53 – Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Substance SDS Section 2.2

Section 2.2 Label Elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

Hazard Pictograms



Signal Word: Danger

Hazard Statements

- H225 Highly flammable liquid and vapour
- H304 May be fatal if swallowed and enters airways
- H400 Very toxic to aquatic life (M-Factor(self-classification)=10)

Precautionary Statements

- P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking
- P233 Keep container tightly closed
- P240 Ground/bond container and receiving equipment.
- P243 Take precautionary measures against static discharge..
- P403+235 Store in a well-ventilated place. Keep cool
- P301+310 IF SWALLOWED: Immediately call a POISON Center or doctor/physician. Do not induce vomiting.

Supplemental Hazard Information (EU); Not applicable

Labelling elements for CLP only

H-phrases for physical, health, and environmental hazards

Limit to 6 P-phrases

Summary

- ❑ Full implementation of CLP by mid 2015
- ❑ Responsibilities defined by role in supply chain
- ❑ Two methods of classification (self-classification and harmonised classification)
- ❑ Three hazard classes (physical, health, and environmental) evaluated for classification
- ❑ Notification to ECHA following classification
- ❑ Classify under both CLP and DSD during transition period
- ❑ CLP information contained in Sections 2 and 16 of SDS



References

- http://guidance.echa.europa.eu/docs/guidance_document/clp_labelling_en.pdf
- http://guidance.echa.europa.eu/docs/guidance_document/clp_introduutory_en.pdf
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**Thank you for your attention!
Questions?**

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