



# GHS Labeling: A Global Survey

- Europe
- Asia Pacific: China, Korea, Japan, Australia, Singapore
- Americas: US OSHA, Brazil



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# EUROPE – CLP LABELS



# What must be CLP labelled?

- Hazardous Substances or Mixtures
  - Biocides and Plant Protection Products subject to both laws
- Non-Hazardous Substances or Mixtures, IF:
  - They require special labelling phrases from Part 2 of Annex II to CLP
  - EUH210: containing a hazardous substance at above 0.1% or 1% (0.2% for gases) depending upon the hazard and not sold to general public
  - Other special cases
- Explosive Article




# Legal Labelling Scenarios

- Since 1 Dec 2010 – Substances:
  - MUST be CLP labelled when placed on market
  - IF on the market as of 1 Dec 2010 may have old label and either REACH 2006 Annex II (IF no significant changes required republishing) or REACH 2010 Annex I SDS
- Until 1 June 2015 - Mixtures
  - MAY have CLP label, but only when delivered with CLP SDS (REACH 2010 Annex II)
  - May have DPD label, but only when delivered with a DPD SDS (REACH 2006 Annex II (IF no significant changes required republishing) or REACH 2010 Annex I)

## Legal Label - SDS Scenarios During the REACH Transition Period

Using this table: for each period of time, a pair of boxes shows the Label and SDS combinations which comply with the transitional requirements of REACH.

	present - 1.Dec 2010		1.Dec 2010 - 1.Dec 2012		1.Dec 2012 - 1.Jun 2015		1.Jun 2015 - 1.Jun 2017		Finally Harmony!?	
	Label	SDS	Label		SDS		Label	SDS	Label	SDS
Substances	DSD	REACH-2006	CLP		REACH-2010-I		CLP	REACH-2010-II	CLP	REACH-2010-II for both substances and mixtures
	CLP	REACH-2006, with CLP classification								
	CLP	REACH-2010-I								
Substances on market at deadline			Label	SDS	Label	SDS	Label	SDS	CLP	REACH-2010-II for both substances and mixtures
			DSD	REACH-2006	CLP	REACH-2010-I	CLP	REACH-2010-I <sup>(2)</sup>		
			CLP	REACH-2010-I			CLP	REACH-2010-II		
Mixtures	Label	SDS	Label		SDS		Label	SDS	CLP	REACH-2010-II for both substances and mixtures
	DPD	REACH-2006	DPD		REACH-2010-I*		CLP	REACH-2010-I		
	 DPD	REACH-2010-I*								
	CLP	REACH-2006, with CLP classification	CLP		REACH-2010-II <sup>(1)</sup>		CLP	REACH-2010-II <sup>(1)</sup>		
CLP	REACH-2010-II <sup>(1)</sup>									
Mixtures on market 1.Dec 2010			Label	SDS	Label	SDS	Label	SDS	CLP	REACH-2010-II for both substances and mixtures
			DPD	REACH-2006	DPD	REACH-2010-I*	DPD	REACH-2010-I*		
			DPD	REACH-2010-I*						
			CLP	REACH-2006, with CLP classification	CLP	REACH-2010-II <sup>(1)</sup>	CLP	REACH-2010-II <sup>(1)</sup>		
Mixtures on market 15.Jun 2015							Label	SDS	CLP	REACH-2010-II for both substances and mixtures
							DPD	REACH-2010-I*		
							CLP	REACH-2010-II <sup>(1)</sup>		
Mixtures on market 15.Jun 2015							Label	SDS	CLP	REACH-2010-II for both substances and mixtures
							DPD	REACH-2010-I*		
							CLP	REACH-2010-II		

\* CLP Classification of mixtures may be shown in §16

(1) The format of REACH-2010-II is followed, but the information in §2.1 and §3.2 must continue to show DSD/DPD classifications and disclosure requirements in §3.2 apply across DSD as well as CLP endpoints.

(2) No transition period is officially provided for substances changing from REACH-2010-I to REACH-2010-II compliant SDS; the substance SDS is substantially equivalent in points 1 and 2 of the REACH 2010 amendment.

# Legal Labeling Scenarios



# The Update Driver

- Even substances or mixtures granted transitional permission to have the older labels or SDS (e.g. REACH 2006 version) **MUST** update when a significant change causes re-design and re-application of a label or republication of the SDS
  - E.g.: a downstream user repackages a substance in such a way that new label elements are necessary. Redesign must comply with the new standard
  - E.g.: new information requires stricter classification on DPD SDS, then republished SDS must comply with REACH-2010 Annex I or II „without undue delay“



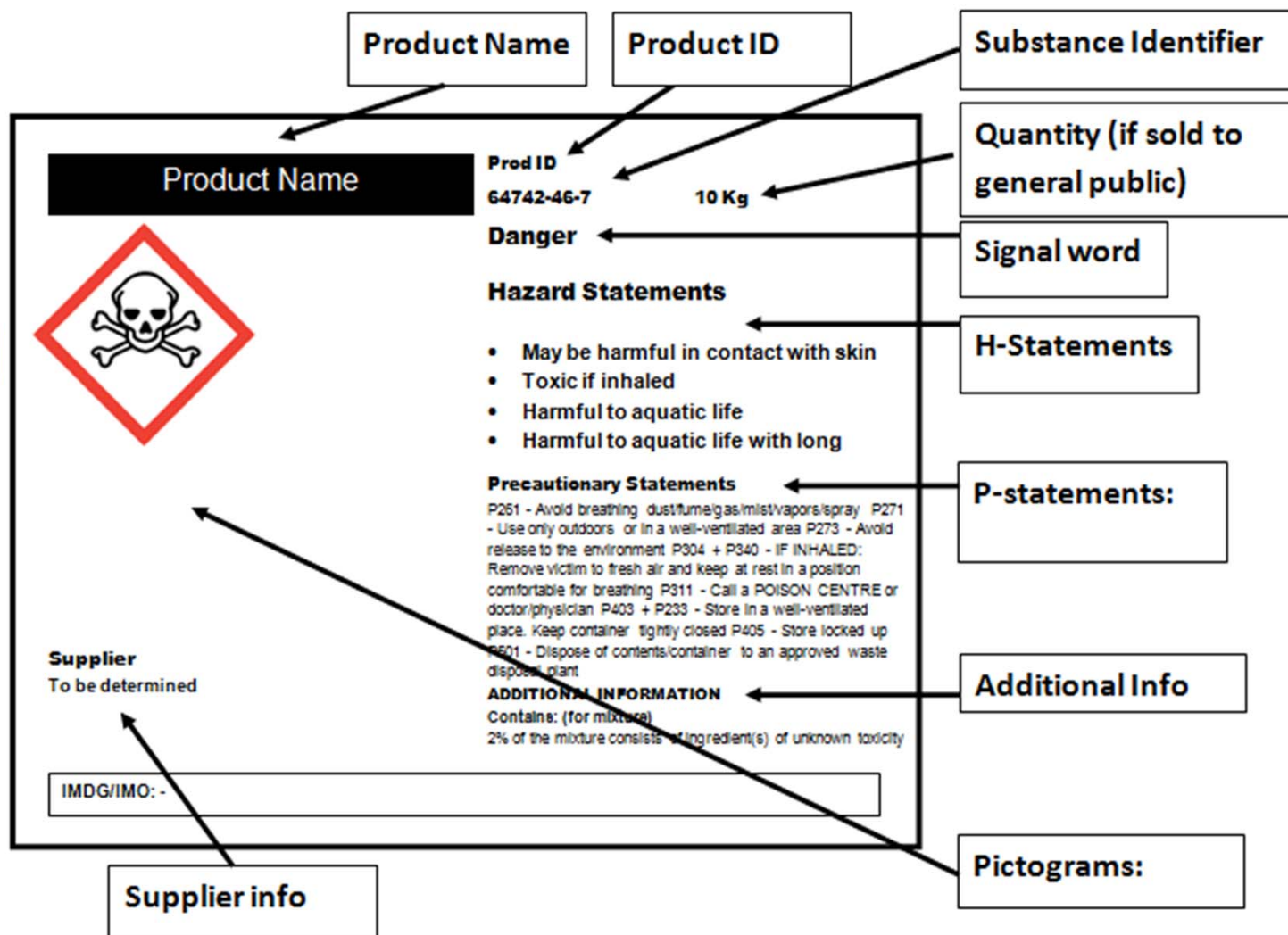
# The Most Important Rule

NEVER SHOW on the same container:

- orange squares and red diamond pictograms
- R-phrases and H-statements
- S-phrases and P-statements



**Europe**  
Layout NOT  
Mandatory







## GHS Elements in CLP

- “Normally, not more than six precautionary statements shall appear on the label, unless necessary to reflect the nature and the severity of the hazards.”
  - GHSP0: Subsection displays all “highly recommended” P-statements
- H-codes and P-codes optional



## Required Supplemental Information

- Supplemental hazard statements
  - SGHEU: EUH001, EUH006, EUH014, EUH018, EUH019, EUH044, EUH029, EUH031, EUH032, EUH066, EUH070, and EUH071.
- Supplemental label statements for certain mixtures
  - Especially EUH208 and EUH210



## Required Supplemental Information

- Unknown toxicity
  - State on label if unknown acute toxicity is  $\geq 1\%$ , per CLP Note 1 to Table 3.1.3 [UTOX (or analog EUTOX) subsection]
  - ECHA guidance shows the aquatic unknown statement per CLP 4.1.3.6.1 as required supplemental information but CLP specifically indicates this is an SDS statement, there is no label requirement [ETOX, or analog EETOX can be used]
- Label statements of other directives



## CLP - ATP2: Minimum Label Size

- Minimum pictogram sizes added (in mm):

Pkg Capacity	Label Size (mm)*	Pictogram (mm)
<=3L	52 x 74 if possible	<u>10 x 10, min</u> <u>16 x 16 if possible</u>
>3 to <= 50L	74 x 105, min	<u>23 x 23, min</u>
>50 to <=500L	105 x 148, min	<u>32 x 32, min</u>
>500L	148 x 210, min	<u>46 x 46, min</u>



## CLP - ATP2: Minimum Label Size

- **Labelling clarification:**

- Each hazard pictogram shall cover at least one fifteenth of the minimum surface area of the label dedicated to the information required by Article 17
- Formalizes long-standing interpretation
- “where a supplier chooses to use a label that is larger than the minimum dimensions for a certain capacity of the package, it is not necessary for the pictogram to be increased as well, provided it covers one fifteenth of the relevant minimum dimensions” –p. 28



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# CHINA – GHS LABELS



Chemical Identification

<b>Chemical Name</b>	Ingredient A: 40%; Ingredient B: 60%
<b>Signal word</b> <b>DANGER</b>	
<b>Pictograms</b> 	
<b>H-Statements</b> Highly flammable liquid and vapor, fatal if swallowed, major toxicity to aquatic organisms [Prevention measures] a) Keep away from heat/spark/open flame/hot surface, use only non-sparking tools; b) Keep container tightly closed; c) Use electrostatic prevention measures, ground/bond container and receiving equipment; d) Use explosion-proof electrical/ventilating/lighting and other equipment; e) Wear protective gloves/eye protection/face protection; f) Wash contacted body parts thoroughly after handling; g) Do not eat, drink and smoke at the workplace, and h) Avoid release into the environment. [Accident response] a) If on skin (or hair): immediately remove (take off) all contaminated clothing. Rinse skin with water/shower; b) If swallowed, induce vomiting, get immediate medical advice/attention; c) Collect spillage; and d) In case of fire, use dry chemical, foam, or carbon-dioxide for extinction. [Safety storage] a) Store in well-ventilated place. Keep cool; and b) Store locked up. [Discard disposal] a) Dispose of contents/containers by incineration.	
<b>P-statements</b> Please refer to the Material Safety Data Sheet	
<b>Supplier info</b>	Supplier: xxx Address: xxx Emergency phone number for chemical accidents: xxx
<b>Emergency phone numbers</b>	Phone Number: xxx Postcode: xxx

Signal word

Pictograms

H-Statements

P-statements

China  
Layout NOT  
Mandatory

Additional info,  
"Reference consulting  
guiding words"

Supplier info

Emergency  
phone numbers



# China: Minimum Label Size

- Minimum pictogram sizes added (in mm):

Pkg Capacity	Label Size (mm)*	Pictogram (mm)
<= 0.1L	Use simplified label	<u>Visible from a distance, even in mist conditions</u>
>0.1 to <=3L	50 x 75, min	
>3 to <= 50L	75 x 100, min	
>50 to <=500L	100 x 150, min	
>500L to <=1000L	150 x 200, min	
>1000L	200 x 300, min	





## China General Rules

- Components and Percentage or Range
  - Trade secret components need not be shown, but hazards must be stated
  - Use of CAS number is recommended
  - No more than 5 ingredients recommended
- Emergency number located in China
- Black border line outside label is required



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# **KOREAN – GHS LABELS**



Product Name

Pictograms

**Korea  
Layout NOT  
Mandatory**

Additional Info

Supplier info

Melamine Alkyd Resin Paint

AAARD-JAPGHS1-KOR  
xxx kg



### Danger

#### Hazard Statements

- Causes skin irritation
- Causes serious eye damage
- May cause genetic defects
- May cause cancer
- May damage fertility or the unborn child
- Causes damage to organs through prolonged or repeated exposure
- Toxic to aquatic life with long lasting effects
- Highly flammable liquid and vapor

#### Precautionary Statements

##### Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Avoid release to the environment

##### Response

- IF EXPOSED or concerned: Get medical attention/advice
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- Immediately call a POISON CENTER or doctor/physician.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- IF ON SKIN: Gently wash with plenty of soap and water
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Immediately call a POISON CENTER or doctor/physician
- IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

##### Collect spillage

- In case of fire: Use CO2, dry chemical, or foam for extinction

##### Storage

- Store locked up
- Store in a well-ventilated place. Keep cool

##### Disposal

- Dispose of contents/container to an approved waste disposal plant

ADDITIONAL INFORMATION  
No information available

#### Supplier

Japan Chemical Database Ltd.  
-9, Kanda Jinbo-cho, Chiyoda-Ku, Tokyo  
'+81-3-3239-5901

UN1993, Flammable liquid, n.o.s. (Xylene, Ethylbenzene), 3, PG II, FP 19C

Product ID

Quantity

Signal word

H-Statements

P-statements



## Korea: Minimum Label Size

- Minimum pictogram sizes added (in mm):

Pkg Capacity	Label Area	Pictogram (mm)
<=5L	5% of surface excluding top & bottom	<u>0.5 cm<sup>2</sup> min</u>
>5 to <=50L	90 cm <sup>2</sup> , min	<u>1/20 of label each*</u>
>50 to <=200L	180 cm <sup>2</sup> , min	<u>1/20 of label each*</u>
>200 to <=500L	300 cm <sup>2</sup> , min	<u>1/20 of label each*</u>
>500L	450 cm <sup>2</sup> , min	<u>1/20 of label each*</u>

\* 1/40<sup>th</sup> of label if 4 pictograms are required (presumably health only)



## Korean Guidelines

- Ingredients with % (TCCA)
- If a hazardous substance is classified for four or more of hazard/risk classifications, only four symbols may be indicated in the order of hazard/risk priority (?Read as Health/Env pictograms?)
- P-statements: “in the case where 4 or more of hazard/risk classifications are applied, it can be limited up to four classifications of statements by the priority order of hazard/risk” (ISHL)
  - Note TCCA allows limit of 6 P-statements




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# JAPAN – GHS LABELS



**Example Product - Japanese GHS Label** CLL-LABEL-JP  
UN1993  
xxx kg



**Danger**

**Hazard Statements**

- Causes skin irritation
- Causes serious eye irritation
- May cause an allergic skin reaction
- Suspected of causing genetic defects
- May cause cancer
- May damage fertility or the unborn child
- Causes damage to organs
- Causes damage to organs through prolonged or repeated exposure
- Toxic to aquatic life with long lasting effects
- May be harmful if swallowed and enters alive
- H360DF - May damage the unborn child. Suspected of damaging fertility.
- Highly flammable liquid and vapor

**Precautionary Statements**

**Prevention**

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting/equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Contaminated work clothing should not be allowed out of the workplace
- Avoid release to the environment
- Use personal protective equipment as required

**Response**

- Specific treatment (see supplemental instructions on the administration of antidotes on this label)
- IF EXPOSED: Call a POISON CENTER or doctor/physician
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- If eye irritation persists: Get medical advice/attention.
- Wash contaminated clothing before reuse
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- If skin irritation or rash occurs: Get medical advice/attention
- Call a POISON CENTER or doctor/physician
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
- Collect spillage
- In case of fire: Use CO2, dry chemical, or foam for extinction

**Storage**

- Store locked up
- Store in a well-ventilated place. Keep cool

**Disposal**

- Dispose of contents/container to an approved waste disposal plant
- Commission a waste disposal contractor licensed by the local government to dispose of contents or container.

**Supplier**

The Viewco, Ltd.  
23 British American Blvd.  
Latham, NY 12110  
Telephone: 800-972-4501  
Fax: 518-540-0200  
Email: [msl@viewco.com](mailto:msl@viewco.com)

**ADR:** UN1993, Flammable liquid, n.o.s. (Xylene, Ethylbenzene), 3, PG II

Product Name

Pictograms:

**Japan  
Layout NOT  
Mandatory**

P-statements:

Supplier info

Product ID

Quantity

Signal word

H-Statements

Additional Info  
• e.g. Fire Service Law

Class 3 Flammable Liquid Keep away from fire



# Japan : Additional Information

**Poisonous  
Substances**

**Not Intended  
for Medicine**

**Deleterious  
Substances**

**Not Intended  
for Medicine**

- Ingredients required to be named on label
- Poisonous and Deleterious Substances Control Law
- Fire Service Law
- Chemical Substances Control Law
- High Pressure Gas Control Law
- Explosives Control Law
- Ship Safety Law
- Civil Aeronautics Law





## Japan:

- No minimum label sizes defined
- Ingredients: ISHL, PDSCL drive requirement
- Example labels:

[http://www.jaish.gr.jp/anzen/gmsds\\_label/label\\_index.htm](http://www.jaish.gr.jp/anzen/gmsds_label/label_index.htm)



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# AUSTRALIA – GHS LABELS



**Australia**  
Layout NOT  
Mandatory

Read label before use. Keep out of reach of children



**Product Name**  
Flammosol

**Product ID**  
FLAMMABLE LIQUID, TOXIC N.O.S.  
(aliphatic hydrocarbons, toxicole)

**Signal word**  
UN 1992

**H-Statements**  
Contains:  
Aliphatic hydrocarbons 95%  
Toxicole 5%

**P-statements:**  
4 L  
DANGER

**Pictograms:**  


**Supplier info**  
IF ON SKIN (or hair): Take off contaminated clothing and wash before re-use. Rinse skin using plenty of soap and water.  
If skin irritation occurs: Get medical advice/attention.  
IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. Rinse mouth.  
Store locked up in a well-ventilated place. Keep cool.  
Dispose of contents/container in accordance with Jurisdictional regulations.

**Additional Info (not shown in example)**  
Highly flammable liquid and vapour  
Toxic if swallowed  
Causes skin irritation  
In case of fire: Use powder for extinction.  
Keep away from sparks and open flames. - No smoking. Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge. Wear protective gloves and eye and face protection.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.

Refer to the Safety Data Sheet before use.  
Madeup Chemical Company, 999 Chemical Street, Chemical Town, My State. Telephone: 1300 000 000  
[www.madeup-chemical-company.com.au](http://www.madeup-chemical-company.com.au)



# Australia: Minimum Label Size

- Minimum pictogram sizes added (in mm):

Pkg Capacity	Minimum Text Size	Pictogram (mm)
<=500mL	2.5 mm	<u>15 x 15 mm</u>
>500mL to <=5L	3 mm	<u>20 x 20</u>
>5 to <=150L	5 mm	<u>50 x 50 mm</u>
>=150L	7 mm	<u>100 x 100 mm</u>



# Australia: Additional Guidelines

- Expiration date, if applicable
- Details of ingredients are required, in descending concentrations or using the ranges <10%; 10-<30%; 30-60%; >60% if concentration is a trade secret.
- Related P-statements should be shown together. Suggested headings:
  - First Aid – use for General + Response categories of statements
  - Accident prevention and personal protective equipment - use for Prevention category
  - Storage (use as is)
  - Disposal (use as is)



# Australia: Additional Guidelines

- H-codes and P-codes should not be shown on labels
- “As a guide, a maximum of between six and ten precautionary statements should appear on the label, depending on the nature and severity of the hazards.”
- Australia has adopted “AUH” statements that correspond to EUH001, EUH006, EUH014, EUH018, EUH019, EUH044, EUH029, EUH031, EUH032, EUH066, EUH070, and EUH071.



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# **SINGAPORE – GHS LABELS**



## Singapore

- No example label given in SS 586 guidance series
- GHS standard elements described
- 6 P-statements acceptable, depending upon hazards
- Minimum label sizes follow EU





# Singapore: Minimum Label Size

- Minimum pictogram sizes added (in mm):

Pkg Capacity	Label Size (mm)*	Pictogram (mm)
<=3L	52 x 74 if possible	<i>Not specified</i>
>3 to <= 50L	74 x 105, min	<i>Not specified</i>
>50 to <=500L	105 x 148, min	<i>Not specified</i>
>500L	148 x 210, min	<i>Not specified</i>



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# US OSHA – GHS LABELS



Product Name

Product ID

Signal word

H-Statements

P-statements:

Headers highlight first aid and fire precautions

**US-OSHA**  
Layout NOT  
Mandatory

Pictograms:



Warning

Harmful if swallowed

Wash hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Dispose of contents/container in accordance with local, state and federal regulations.

**First aid:**

If swallowed: Call a doctor if you feel unwell. Rinse mouth.

GHS Example Company, 123 Global Circle, Anyville, NY 130XX

Telephone (888) 888-8888

Supplier info

Additional Info (not shown in example)

HS85  
Batch number: 85L6543



# US-OSHA: Minimum Label Size

- **OSHA HCS establishes no minimum label or pictogram sizes**
  - DOT diamond transport label size requirement is referenced



## US-OSHA: Additional Guidelines

- The skull and crossbones may appear together with the exclamation mark because US OSHA precedence differs (C.2.1.2)
- The environmental pictogram is not mandatory but may be used
- OSHA specifically allows BOTH the GHS physical hazard pictogram and the DOT transport diamond of the same class to appear on the container (Appendix C.2.3.3 will be amended)
- NFPA, HMIS, or other graphics may continue to be used as long as consistent with and not impeding identification of HCS elements



## US-OSHA: Additional Guidelines

- The supplementary information section must identify the percentage of ingredient(s) of unknown acute toxicity when it is present in a concentration of  $\geq 1\%$  (and the classification is not based on testing the mixture as a whole).
- Supplementary information may also indicate hazards not otherwise classified
- Labels must be revised within 6 months of becoming aware of any significant new information about the product hazards



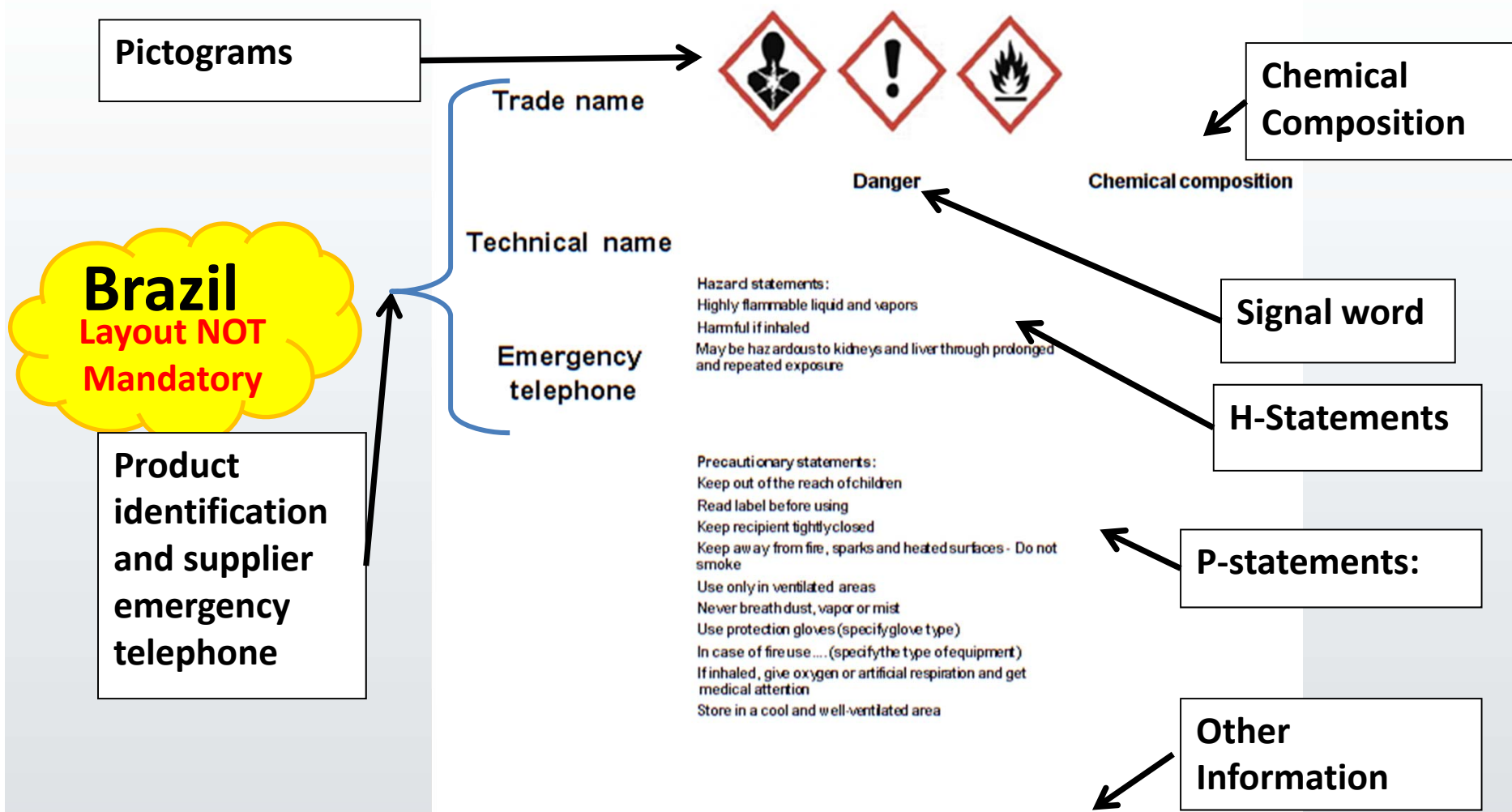
## US-ANSI: Additional Guidelines

- The chemical names of the components contributing substantially to the hazards of a product shall be included as part of the label
- Several state right-to-know regulations may require the listing of chemical components including those that do not contribute to the hazards of the product



# **BRAZIL – GHS LABELS**





**Hazard statements:**  
Highly flammable liquid and vapors  
Harmful if inhaled  
May be hazardous to kidneys and liver through prolonged and repeated exposure

**Precautionary statements:**  
Keep out of the reach of children  
Read label before using  
Keep recipient tightly closed  
Keep away from fire, sparks and heated surfaces - Do not smoke  
Use only in ventilated areas  
Never breath dust, vapor or mist  
Use protection gloves (specify glove type)  
In case of fire use ... (specify the type of equipment)  
If inhaled, give oxygen or artificial respiration and get medical attention  
Store in a cool and well-ventilated area

"The Material Safety Data Sheet for Chemical Products of this hazardous chemical can be obtained through..."



## Brazil

- Note that pictogram precedence does not comply to GHS precedence.
- Chemical composition: no percentage required
- Other information: "The Safety Data Sheet for Chemical Products of this hazardous chemical can be obtained through...".



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# **GENERAL ISSUES – OVERVIEW**



# GHS AND TRANSPORT PICTOGRAMS

- **GHS:** „Where a *UN Model Regulations on the Transport of Dangerous Goods* pictogram appears **on a label**, a GHS pictogram for the same hazard should not appear.“ (1.4.10.4.2.3)
- **US OSHA:** Where a pictogram required by the Department of Transportation under 49 CFR appears **on a shipped container**, the pictogram specified in C.4 for the same hazard shall not appear (p.17826, item C.2.3.3) – will be amended to allow DOT and HCS (GHS) pictograms together per OSHA Brief
- **China:** The transport symbol can also be placed in a position close to the precautionary label on the packaging, under the latter and, if the pictogram of the precautionary label and the transport symbol are repeated with one another, then the pictogram in the precautionary label shall be deleted.
- **Others:** Follow GHS



## RED BORDERS ON PICTOGRAMS

- **GHS:** „...on a label for a package which will not be exported, the competent authority may choose to give suppliers and employers discretion to use a black border“ (1.4.10.4.2.3)
- **CLP:** No allowance for a black border
- **US OSHA:** OSHA has determined that red pictogram borders will maximize recognition of the warning label and ensure consistency; therefore the final rule requires red borders for both domestic and international labeling (p.17591)



## RED BORDERS ON PICTOGRAMS

- **China:** If it is for domestic use, then the color of the square border can be black. “ (GB 15258-2009, 5.2)
- **Japan:** May use black border if the packaged goods are not exported (JIS Z7251-2010, 5.2.2)
- **Korean guidance:** the border of the danger symbol shall be in red in principle but may be in black if it is not feasible (Ch. 2, point 3)
- **Singapore:** When a GHS pictogram appears on a label of a packaging which will not be exported, the suppliers may choose to use a black border on the pictogram instead of the red border recommended in GHS (SS 586: Part 2: 2008, 6.2)



## RED BORDERS ON PICTOGRAMS

- CLP: “Where empty diamonds are unavoidable, it is recommended to at least black them out”
- US OSHA: while OSHA is not opposed to the use of preprinted stock, OSHA has decided not to allow the use of blank red frames on finished labels
- Others: no specific guidance known



# CLP – FAQ: Pre-printed Pictograms

- **Black out pre-printed, unused diamond borders:**

It is acknowledged that mass pre-printing of labels is current practice in industry. This means that the label background is printed first before it is overprinted with the specific label information in a second step. This two-step process may lead to the situation that in case only few hazard pictograms are needed for the label, one or more pre-printed diamonds may have to be left empty or, alternatively, be blacked-out in a second step.

While CLP does not explicitly forbid the use of blank or blacked out diamonds on the label, Article 19(1) requires suppliers to include relevant hazard pictograms on the label which are intended to convey specific information on the hazards concerned. While on the other hand, CLP Article 25(3) requires that any information which goes beyond the mandatory label elements must not contradict or cast doubt on the messages provided by the latter.

Therefore, due to the current lack of suitable printing techniques afforded by SMEs, it may not always be possible to only include hazard pictograms that fulfil these conditions. This means that any blank or blacked out diamond(s) should be seen in the light of this provision.

In general, CLP leaves the decision on how to label so as to comply with the labelling requirements of the CLP Regulation to suppliers. ECHA recommends suppliers to carefully check whether any such empty diamonds may lead to confusion among the customers.

**Where empty diamonds are unavoidable, it is recommended to at least black them out,**

so as to avoid the impression that relevant hazard symbols have been left out through a printing mistake insofar as possible.





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# **GHS REV. 3 AND CLP - ATP2 LABEL IMPACTS**



# Ozone Classification

- **Ozone becomes a GHS endpoint**
  - EUH059 Special Additional Hazard Phased Out
    - P502 replaces P273/P501
  - Ozone Classification Elements

Bldg Block	Pictogram	Signal Word	H-statement/P-statement
Category 1		Danger	H420 - Harms public health and the environment by destroying ozone in the upper atmosphere
			P502 - Refer to manufacturer/supplier for information on recovery/recycling



# Precedence H-stmts

- **H-statement precedence clarified**
  - if the hazard statement H410 “Very toxic to aquatic life with long lasting effects” is assigned, the statement H400 “Very toxic to aquatic life” may be omitted
  - if the statement H314 “Causes severe skin burns and eye damage” is assigned, the statement H318 “Causes serious eye damage” may be omitted



## New H-statements (1/2)

- **Optional Combined H-statements added**
  - H300 + H310 - Fatal if swallowed or in contact with skin
  - H300 + H330 - Fatal if swallowed or if inhaled
  - H310 + H330 - Fatal in contact with skin or if inhaled
  - H300 + H310 + H330 - Fatal if swallowed, in contact with skin or if inhaled
  - H301 + H311 – Toxic if swallowed or in contact with skin
  - H301 + H331 - Toxic if swallowed or if inhaled
  - H311 + H331 - Toxic in contact with skin or if inhaled
  - H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled



## New H-statements (2/2)

- **Optional Combined H-statements added**
  - H302 + H312 – Harmful if swallowed or in contact with skin
  - H302 + H332 - Harmful if swallowed or if inhaled
  - H312 + H332 - Harmful in contact with skin or if inhaled
  - H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled
- **Ozone Hazard Statement Added**
  - H420 - Harms public health and the environment by destroying ozone in the upper atmosphere



## Fish without Fins





# **ADDITIONAL CLP - ATP2 LABEL IMPACTS**



# CLP - ATP2: Label Thresholds

- **Labeling Statements Affected**

- EUH208: „Contains .... May produce an allergic reaction“
- EUH210: „SDS available upon request“

- **New Sensitizer Thresholds**

- Cat. 1A:  $\geq 0.01\%$  but less than threshold for classification
- Cat. 1 or 1B:  $\geq 0.1\%$  but less than threshold for classification
- OR:  $\geq 0.1 \times \text{specific concentration}$  but less than the classification concentration (if spec. conc.  $< 0.1$ )

Clarified: all sensitizers \*on the label: In „Contains“ if contributing to classification; in EUH208 (\*if above labelling threshold)





## CLP – ATP2: Exclamation Mark Conforms to GHS standard





**Chemical Safety Consulting**

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QUESTIONS?