

## **Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals**

**Sub-Committee of Experts on the Globally Harmonized  
System of Classification and Labelling of Chemicals**

**4 June 2018**

### **Thirty-fifth session**

Geneva, 4-6 July 2018

Item 4 (d) of the provisional agenda

**Hazard communication: other issues**

## **Amendments to Annex 7, examples 1 - 7**

**Transmitted by the United Nations Institute for Training and Research  
(UNITAR)**

### **Introduction**

1. At its thirty-third session the GHS Sub-Committee welcomed the proposal of UNITAR (informal document INF.9 (33<sup>rd</sup> session)) to amend Annex 7, example 7 and recommended further amendments to other examples in Annex 7.

2. At the thirty-fourth session, UNITAR presented a proposal with amendments and corrections to examples 1 to 7 in Annex 7 of the GHS (informal document INF19 (34<sup>th</sup> session)). The Sub-Committee took note of the proposals and invited the experts to provide comments to the representative of UNITAR.

3. This informal paper takes account of the comments and suggestions received, especially by the United Kingdom, and other experts, and proposes detailed amendments to Annex 7, examples 1-7 on combination and single packagings, to improve consistency with the requirements and recommendations of the GHS text (specific references are to the seventh revised edition), particularly as these examples are used for capacity building activities.

### **Issues**

4. Stakeholders rely on the GHS text to provide clear and consistent guidance to those responsible for implementing the GHS. Furthermore, the text is as an integral tool and point of ultimate reference for training and capacity building.

5. As capacity building is an integral part of the GHS, and one of the functions of the Sub-Committee is “to promote understanding and use of the GHS and to encourage feedback”, UNITAR would like to propose that the Annex 7 is amended to ensure that the examples better illustrate the requirements of the GHS and the spirit of other recommendations. The revised annex would provide more consistent examples of GHS labelling.

## Proposal

6. The proposal for amending the examples covers the following issues, and should be read in conjunction with the annex to this document, with the proposed changes incorporated:

- (a) In the header of each example the correct classification of the product/chemical is given, i.e. hazard class and hazard category;
- (b) In examples 1 to 3, “warning” is removed from the “Inner Packaging” line. Thus, it reads; “Inner Packaging: Plastic bottle with GHS hazard label”. The term “hazard warning label” is not defined and not common;
- (c) To make Examples 1 to 6 more similar to practical labelling and thus more illustrative, “Signal word”, “Hazard statements” and “Precautionary statements” are substituted by actual designations resulting from the given classifications; i.e. the appropriate signal word and hazard statements are given together with one or two applicable precautionary statements for each hazard class/category with a reference to Annex 3, Sections 2 and 3 for further P statements as appropriate.

This would be an additional tool for “promoting the understanding and use of the GHS”.

Note: With respect to consistency in this aspect in Annex 7 and to meet the special requirements of labelling of small packagings, the examples 8-10 should be examined separately. This will be addressed in a working document planned for the 36<sup>th</sup> session of the UNSCEGHS.

- (d) In examples 2 and 5 clarification is provided that specific target organ toxicity (STOT) refers to single and repeated exposure respectively. Furthermore, the additional name “LEAD CHROMOMIUM” is substituted by “YELLOW BRILLIANCE” to avoid misunderstandings for not classifying a lead-chromium paint as a carcinogen and reproductive toxicant;
- (e) In reviewing the seventh revised edition, it is noted that Example 4 contains the exclamation mark pictogram, but no pertaining hazard is given. It is understood that this pictogram is to be removed as a corrigendum to the printed version, not as an amendment. This has been removed in example 4 below.
- (f) At the end of the Notes to Examples 4 and 5 insert “(see Example 7)”;
- (g) Example 7: in the introduction:
  - (i) Amend the heading to ‘Examples 7a and 7b: Additional guidance when transport and other GHS information appear on single packagings (see 1.4.10.5)’
  - (ii) Delete “(e.g. a 200 l drum)”
  - (iii) At the end of paragraph (a) add: “The GHS pictogram (e.g. Flame or Corrosion) does not appear on the label when the Transport pictogram reflects the same hazard (see 1.4.10.5.1)”
  - (iv) At the end of paragraph (e) add “Whereas some regulatory authorities require the pictogram to be ‘sufficiently wide to be clearly visible’, others prescribe a minimum size or certain relation of the pictogram size to the size of the whole label.”
  - (v) Add as a new paragraph (f) “These examples are not intended to cover all specific requirements which have been included in national

legislation implementing the GHS nor all possible supplemental information. They reflect the information required on a GHS label as described in paragraph 1.4.10.5.2.”

- (vi) Amend and expand the final sentence to read: “The following are examples of how such a label may appear:

7a: A mixture in a 200l drum for exclusive use in workplaces. For the purpose of this example it has been assumed that the GHS competent authority has given the manufacturer/supplier discretion to include relevant substance identities in the SDS instead of including them on the label (see paragraph 1.4.10.5.2 (d) (iii)).

7b: A mixture used both by consumers and in workplaces, so the GHS label includes “Contains XXXX” to give the chemical identities of ingredients contributing to certain types of toxicity when these hazards appear on the label (see paragraph 1.4.10.5.2 (d) (ii)).

The existing example 7 is renumbered 7a and the text under the heading is amended to read: ‘A mixture classified as (a) Flammable liquids category 2, (b) Acute toxicity inhalation, category 4; and (c) Specific target organ toxicity – repeated exposure category 2.

The first panel is amended as follows:

- “Code” and “Product name” are substituted by the name “Flamtoxin”.
- In example 7a, where the chemical is exclusively for use in workplaces, it has been assumed that the competent authority has given the manufacturer/supplier discretion to include chemical identities of relevant substance identities in the SDS instead of including them on the label (see paragraph 1.4.10.5.2 (d) (iii)). However, in example 7b the chemical is intended for consumer as well as workplace use and so the label includes “Contains XXXX” to give the chemical identities of ingredients contributing to certain types of toxicity when these hazards appear on the label (see paragraph 1.4.10.5.2 (d) (ii)).
- Emergency phone number is removed, since in the GHS it is only a requirement for SDSs

The second panel is amended as follows:

- The statement “Read label before use” (P103) is removed in Example 7a since this product in a 200l drum is not for consumer use (see Annex 3, Table A3.2.1); P103 is included in updated form in 7b to “Read carefully and follow all instructions” in line with GHS rev.7 and moved up to the top of the label to fulfil its intended purpose more distinctly.
- “P102 - Keep out of ~~the~~ reach of children” is removed for the same reason as for P103 (it is included in its correct form (deleting “the”) and in a prominent position in Example 7b- see below).
- The size of the GHS pictograms is slightly increased to emphasize its eye-catching function, thus, taking the original proposal of UNITAR and concerns expressed during the discussion of proposal 5(e) in UN/SCRGHS/33/INF 9 for increasing the GHS pictogram size.
- The arrangement of the label elements is structured to reflect the requirements in 1.4.10.5.4.1 on the order: Pictograms, Signal word, Hazard statements, and in addition for the precautionary statements.

- P260 is adapted to applicable conditions, by removing the slashes in ‘dust/fume/gas/mist/vapours/spray’ to read as “Do not breathe mist, vapour or spray”.
- P280 is adapted to “Wear protective gloves, protective clothing and eye protection”.
- P370 + P378: The dots are substituted to read “In case of fire: Use dry powder to extinguish”
- The words FIRST AID are removed, since this is not a P statement according to Annex 3, A3.2.2.1 and not necessary.
- P304 + P340: Addition of new P317 to read: “IF INHALED: Get medical help. Remove person to fresh air and keep comfortable for breathing”.
- P312 – Specified by deleting POISON CENTER/doctor to read as new P319: “Get medical help if you feel unwell” (Remark: P317 and P319 are subject to adoption of the proposal in UN/SCEGHS /35/INF 8)

The third panel is amended as follows:

- The information with respect to the UN Number and Proper shipping name is given more explicitly in accordance with the classification.
- Removal of (Universal Product Code (UPC))

A new example 7b is added as in the Annex attached. This example is a mixture used by both by consumers and in workplaces.

### **Action requested**

7. The Sub-Committee is invited to comment on the proposed changes to Annex 7 of the GHS as shown in the Annex of this document. A working document could then be prepared for the 36<sup>th</sup> session.

## Annex

### Revised examples 1 to 7 in GHS Annex 7

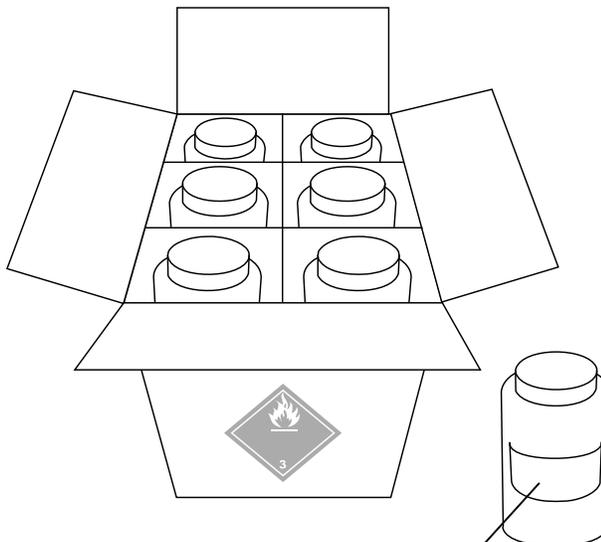
#### Examples of arrangements of the GHS label elements

The following examples ~~are provided for~~ illustrate ~~purposes~~ ways in which the GHS label elements may be arranged in accordance with section 1.4.10.5 and are subject to further discussion and consideration by the GHS Sub-Committee.

**Example 1: Combination packaging for a chemical classified as Flammable liquids Category 2 flammable liquid**

Outer Packaging: Box with a flammable liquid transport label\*

Inner Packaging: Plastic bottle with GHS hazard ~~warning~~ label\*\*



<b>2-METHYL FLAMMALINE</b>	<b>Product identifier</b> (see 1.4.10.5.2 (d))
	<b>SIGNAL WORD: <u>Danger</u></b> (see 1.4.10.5.2 (a))  <b>Hazard statements: <u>Highly flammable liquid and vapour</u></b> (see 1.4.10.5.2 (b))
<b><u>Precautionary statements: Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking</u></b> (see 1.4.10.5.2 (c) and <b><u>Annex 3 Sections 2 and 3 for further P statements that may apply</u></b> ) <del>Additional</del> <u>Supplemental information as allowed or required by the competent authority as appropriate</u> <b>Supplier identification</b> (see 1.4.10.5.2 (e))	

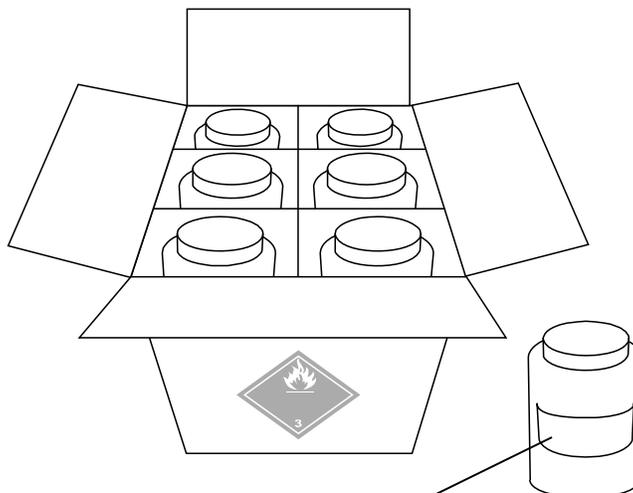
\* Only the UN transport markings and labels are required for outer packagings.

\*\* A flammable liquid pictogram as specified in the “UN Recommendations on the Transport of Dangerous Goods, Model Regulations” may be used in place of the GHS pictogram shown on the inner packaging label.

**Example 2: Combination packaging for a chemical classified as Flammable liquids Category 2 ~~and Specific target organ toxicity toxicant~~ and Single exposure Category 2**

Outer Packaging: Box with a flammable liquid transport label\*

Inner Packaging: Plastic bottle with GHS hazard ~~warning~~ label\*\*



<p><b>PAINT (FLAMMALINE, YELLOW BRILLANCE LEAD CHROMOMIUM)</b></p>	<p><b>Product identifier</b> (see 1.4.10.5.2 (d))</p>
	<p><b>SIGNAL WORD</b> Danger (see 1.4.10.5.2 (a))</p>
	<p><b>Hazard statements</b> <u>Highly flammable liquid and vapour.</u> <u>May cause damage to organs</u> (see 1.4.10.5.2 (b))</p>
<p><b>Precautionary statements</b></p>	
<p><u>Keep container tightly closed. Do not breathe mist, vapours or spray</u> (see 1.4.10.5.2 (c) and Annex 3 Sections 2 and 3 for further P statements that may apply)</p>	
<p><u>Additional Supplemental information as allowed or required by the competent authority as appropriate.</u></p>	
<p><b>Supplier identification</b> (see 1.4.10.5.2 (e))</p>	

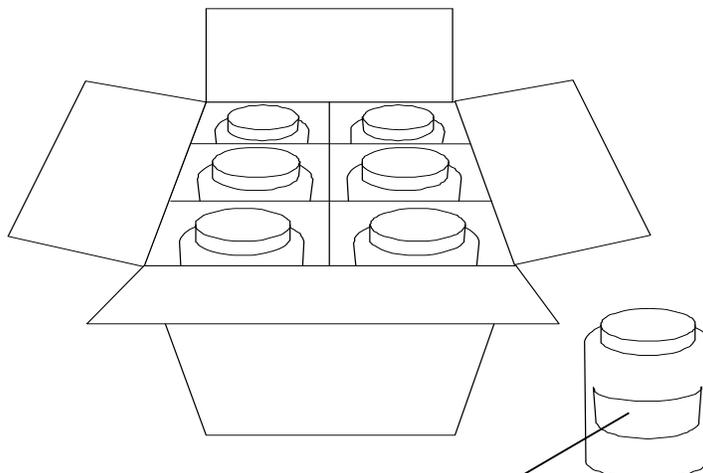
\* Only the UN transport markings and labels are required for outer packagings.

\*\* A flammable liquid pictogram as specified in the UN Recommendations on the Transport of Dangerous Goods, Model Regulations may be used in place of the GHS pictogram shown on the inner packaging label.

**Example 3: Combination packaging for a chemical classified as Skin irritation Category 2 skin irritant and Eye irritation Category 2A eye irritant**

Outer Packaging: Box with no label required for transport\*

Inner Packaging: Plastic bottle with GHS hazard ~~warning~~ label



**BLAHZENE SOLUTION**

**Product identifier**  
(see 1.4.10.5.2 (d))



**SIGNAL WORD:** Warning (see 1.4.10.5.2 (a))

**Hazard statements:** Causes skin and serious eye irritation (see 1.4.10.5.2 (b))

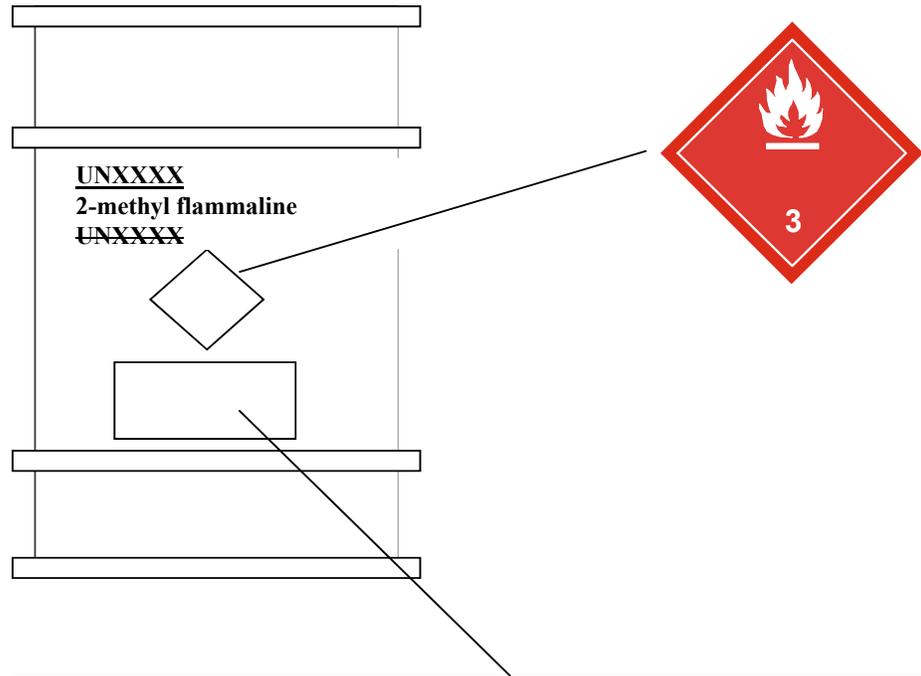
**Precautionary statements:** Wear protective gloves, eye and face protection (see 1.4.10.5.2 (c) and Annex 3 Sections 2 and 3 for further P statements that may apply)

~~Additional~~ Supplemental information as allowed or required by the competent authority as appropriate.

**Supplier identification (see 1.4.10.5.2 (e))**

\* Some competent authorities may require a GHS label on the outer packaging in the absence of a transport label. For products not classified as dangerous for transport which do not require TDG regulation marks, other shipping marks would be found on the outer packaging.

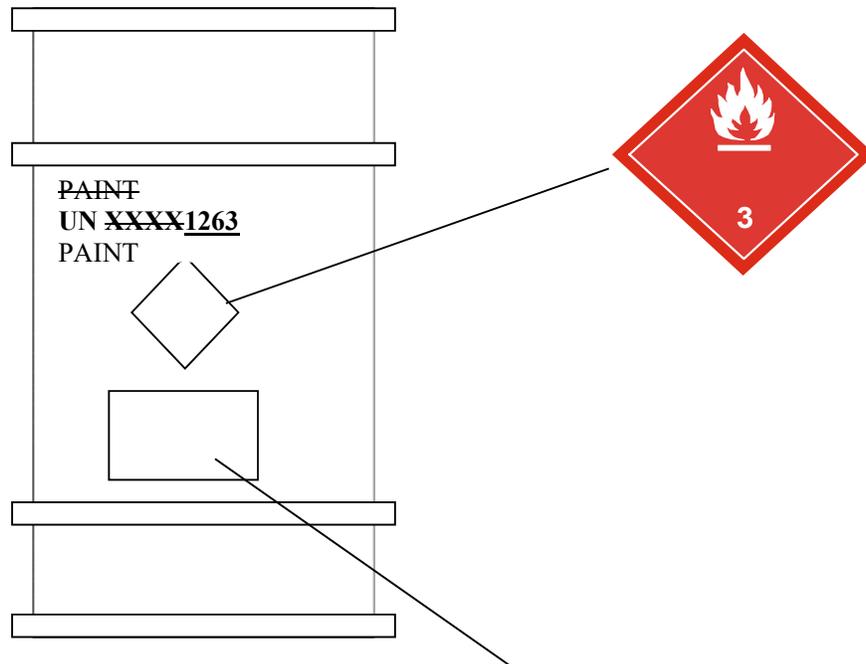
**Example 4: Single packaging (200l drum) for a chemical classified as Flammable liquids Category 2 flammable liquid**



<b>2-METHYL FLAMMALINE</b>	<b>Product identifier</b> (see 1.4.10.5.2 (d))
	<b>SIGNAL WORD:</b> <u>Danger</u> (see 1.4.10.5.2 (a))
	<b>Hazard statements:</b> <u>Highly flammable liquid and vapour</u> (see 1.4.10.5.2 (b))
<b>Precautionary statements:</b> <u>Use carbon dioxide to extinguish (see 1.4.10.5.2 (c) and Annex 3 Section s 2 and 3 for further P statements that may apply)</u>	
<del>Additional Supplemental</del> information as <u>allowed or</u> required by the competent authority as appropriate.	
<b>Supplier identification</b> (see 1.4.10.5.2 (e))	

*Note: The GHS label and the flammable liquid pictogram and markings required by the “UN Recommendations on the Transport of Dangerous Goods, Model Regulations” may also be presented in a combined format (see Example 7).*

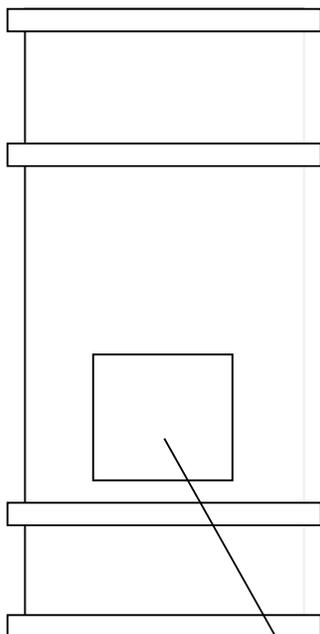
**Example 5: Single packaging for a Category 1 chemical classified as Flammable liquids Category 2 and Specific target organ toxicant and toxicity - Repeated exposure Category 2 flammable liquid 1**



<b>PAINT (METHYL FLAMMALINE)<sub>7</sub></b>	<b>Product identifier</b> (see 1.4.10.5.2 (d))
	<p><b>SIGNAL WORD:</b> <u>Danger</u> (see 1.4.10.5.2 (a))</p> <p><b>Hazard statements:</b> <u>Highly flammable liquid and vapour. Causes damage to organs through prolonged or repeated exposure</u> (see 1.4.10.5.2 (b))</p> <p><b>Precautionary statements:</b> <u>Use non-sparking tools. Wash hands thoroughly after handling</u> (see 1.4.10.5.2 (c) <u>and Annex 3 Sections 2 and 3 for further P statements that may apply</u>)</p> <p><del>Additional</del> <u>Supplemental</u> information as <u>allowed</u> or required by the competent authority as appropriate.</p> <p><b>Supplier identification</b> (see 1.4.10.5.2 (e))</p>

*Note: The GHS label and the flammable liquid pictogram and markings required by the “UN Recommendations on the Transport of Dangerous Goods, Model Regulations” may also be presented in a combined format (see Example 7)*

Example 6: Single packaging for a chemical classified as ~~Category 2 Skin irritation~~ ~~at~~ Category 2 and ~~Category 2A Eye irritant~~ irritation Category 2A



**BLAHZENE SOLUTION**

Product identifier  
(see 1.4.10.5.2 (d))



~~SIGNAL WORD:~~ Warning (see 1.4.10.5.2 (a))

~~Hazard statements:~~ Causes skin and serious eye irritation (see 1.4.10.5.2 (b))

~~Precautionary statements:~~ Wear protective gloves and eye protection (see 1.4.10.5.2 (c) and Annex 3 Sections 2 and 3 for further P statements that may apply)

~~Additional Supplemental~~ information as allowed or required by the competent authority as appropriate.

Supplier identification (see 1.4.10.5.2 (e))

**Examples 7a and 7 b: Additional guidance when transport and other GHS information appear on single packagings (see 1.4.10.5)**

- (a) Where transport and other GHS information appear on a single packaging (e.g. a 200l drum), consideration must be given to ensure that the label elements are placed in a manner that addresses the needs of the different sectors. The GHS pictogram (e.g. Flame or Corrosion) does not appear on the label when the transport pictogram reflects the same hazard (see 1.4.10.5.1)
- (b) Transport pictograms must convey information immediately in an emergency situation. They must be able to be seen from a distance, as well as in conditions that are smoky or otherwise partially obscure the package;
- (c) The transport-related pictograms are distinct in appearance from pictograms intended solely for non-transport purposes which helps to distinguish them;
- (d) The transport pictograms may be placed on a separate panel of a GHS label to distinguish them from the other information or may be placed adjacent to the other GHS information on the packaging;
- (e) The pictograms may be distinguished by adjusting their size. Generally speaking, the size of the non-transport pictograms should be proportional to the size of the text of the other label elements. This would generally be smaller than the transport-related pictograms, but such size adjustments should not affect the clarity or comprehensibility of the non-transport pictograms. Whereas some regulatory authorities require the GHS pictogram to be 'sufficiently wide to be clearly visible', others prescribe a minimum size or certain relation of the pictogram size to the size of the whole label;
- (f) These examples are not intended to cover all specific requirements which have been included in national legislation implementing the GHS nor all possible supplemental information. They reflect the required basic GHS label information as described in paragraph 1.4.10.5.2.

The following ~~are~~ ~~is an~~ examples of how such a label may appear:

- 7a: A mixture in a 200l drum for exclusive use in workplaces. For the purpose of this example it has been assumed that the GHS competent authority has given the manufacturer/supplier discretion to include relevant substance identities in the SDS instead of including them on the label (see paragraph 1.4.10.5.2 (d) (iii)).
- 7b: A mixture used both by consumers and in workplaces

**7a: Single packaging using 3 adjacent panels to convey multiple hazards.**

Product A mixture classified as: (a) ~~Category 2 Flammable liquid~~; Flammable liquid, Category 2, (b) ~~Category Acute 4 (by inhalation)~~; and Acute toxicity-inhalation, Category 4, and (c) ~~Category 2 Specific target organ toxicant following repeated exposure~~; Specific target organ toxicity-Repeated exposure, Category 2.

**Code**  
**FLAMTOXAN**  
**PRODUCT NAME**

**COMPANY NAME**  
**Street Address**  
**City, State Postal Code, Country**  
**Phone Number**

**DIRECTIONS FOR USE: XXXX**  
~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~

**Fill weight: xxxx      Lot number: xxxx**  
**Gross weight: xxxx    Fill Date: xxxx**  
**Expiration Date: xxxx**



**Danger**  
**Keep out of the reach of children**  
**Read label before use**

**Highly flammable liquid and vapour.**  
**Harmful if inhaled.**  
**May cause liver and kidney damage through prolonged repeated exposure.**

Keep container tightly closed.  
 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.  
 Use only outdoors or in a well-ventilated area.  
 Do not breathe/dust, fumes/gas/mist/, vapours/ or spray.  
 Wear protective gloves/, protective clothing/ and eye protection.  
 Ground and bond container and receiving equipment.  
 In case of fire: Use dry powder to extinguish.

**FIRST AID**  
 IIF INHALED: Get medical help. Remove person to fresh air and keep comfortable for breathing.  
 Call ~~A POISON CENTER/ a doctor~~ Get medical help if you feel unwell.  
 Store in a well-ventilated place. Keep cool.  
Dispose of contents/container to the municipal collection point.

**UN Number 1993**  
**FLAMMABLE LIQUID, N.O.S.**  
**Proper shipping name**  
**(Contains XXXX)**

[Universal Product Code (UPC)]

7 b: Single packaging using 3 adjacent panels to convey multiple hazards.

A mixture classified as: (a) Acute toxicity-Inhalation, Category 4, (b) Skin corrosion/irritation, Category 1C and (c) Specific target organ toxicity-Repeated exposure, Category 2.

<b>Read carefully and follow all instructions</b>		
<p><b>STRIPPAN</b> <b>Contains: XXXX</b></p> <p><b>COMPANY NAME</b> Street Address City, State Postal Code, Country Phone Number</p> <p><b>DIRECTIONS FOR USE: XXXX</b></p> <p><b>Fill weight: xxxx    Lot Number: xxxx</b> <b>Gross weight: xxxx    Fill Date: xxxx</b> <b>Expiration Date: xxxx</b></p>	 	
	<p><b>Danger</b></p> <p>Harmful if inhaled. Causes severe skin burns and eye damage. May cause liver and kidney damage through prolonged or repeated exposure.</p>	<p>UN 1760 CORROSIVE LIQUID, N.O.S (Contains XXXX)</p>
	<p>Keep out of reach of children Wash hands thoroughly after handling. Wear protective gloves, protective clothing and eye protection. Do not breathe mist, vapours or spray. Use only outdoors or in a well-ventilated area. If exposed or concerned: Get immediate emergency medical help IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN: Take off immediately all contaminated clothing: Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical help if you feel unwell. Store locked up. Dispose of contents/container to the municipal collection point.</p>	