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

5 December 2011

Twenty-second session
Geneva, 7-9 December 2011
Item 3 of the provisional agenda
Hazard communication issues

Progress report on work of the informal correspondence group on hazard communication for corrosive to metals

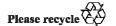
Transmitted by the International Association for Soaps, Detergents and Maintenance Products (AISE) on behalf of the informal correspondence group

Background documents

INF.31 (19th session); ST/SG/AC.10/C.4/2010/7; INF.21 (20th session); INF.32 (20th session); INF.22 (20th session); INF.10 (21st session)

Introduction

- 1. At the 20th session in December 2010, the Sub-Committee of Experts on the GHS agreed the following competent authority option in GHS 1.4.10.5.5 to address potential issues which may arise if the physical hazard 'Corrosive to Metals' is adopted for supply/use situations:
- "Where a substance or mixture is classified as corrosive to metals but not corrosive to skin and/or eyes, the competent authority may choose to allow the hazard pictogram linked to corrosive to metals to be omitted from the label of such substances or mixtures which are in the finished state, packaged for consumer use."
- 2. However, the Sub-Committee considered this amendment to be a temporary solution thus agreed that an informal correspondence group should be established to develop a permanent solution in the biennium 2011 2012.
- 3. As reported in UN/SCEGHS/21/INF.10, the newly established correspondence group identified five possible options for a permanent solution to address the potential issues associated with the adoption of 'Corrosive to Metals' in the supply/use sector:
 - a) Option 1 Make the current competent authority option in GHS 1.4.10.5.5 (as adopted by the Sub-Committee in Dec 2010) the permanent solution;
 - b) Option 2- Insert a clear statement that the hazard class 'Corrosive to Metals' is not relevant for consumers i.e. statement in Annex 1 to the GHS along the lines of the statement 'Not required under UN Model Regulations' which appears in certain hazard classes/categories;
 - c) Option 3 Separate pictograms for metal corrosion and skin corrosion;



- d) Option 4 Add a new pictogram to distinguish 'corrosive to eye' to the separate pictograms proposed in option3;
- e) Option 5 Delete the hazard pictogram label element completely in Chapter 2.16.
- 4. These options were then further considered by the correspondence group at their meeting held in plenary during the 21st session. Some experts favoured option 3 but noted that if the option was to be progressed, transport experts should be involved in the work and some precedence rules for the selection of pictograms would be needed. Several experts were concerned about the impact that adoption of option 3 might have on hazard communication for other hazard classes, i.e. the same argument used to justify separate pictograms for the different types of corrosion may also be used for other hazard classes currently sharing the same pictogram.
- 5. The correspondence group agreed that it was difficult to reach a conclusion on which option(s) to progress at this stage and considered further discussions were needed.
- 6. This informal document summarises the activities of the correspondence group since the 21st session.

Activities report

- 7. In preparation for discussions at the 22^{nd} session, the correspondence group was requested to rank the five possible options in order of preference with a view to identifying the level of support for each option. Based on this feedback, it was suggested that the options with no support could be disregarded and discussions at the 22^{nd} session could focus on one or two well-supported options. The correspondence group was also requested to identify additional ideas for other possible options.
- 8. Feedback received from the correspondence group indicated that options 1 and 2 were not supported/not favoured as possible permanent solutions. It was also suggested by some members that options 3 and 4 need further consideration this would include discussion with transport colleagues (e.g. do they see an advantage to distinguish between the different types of corrosion?). Modifications to options 3 and 5 were also suggested along with one new option these are set out in Annex 1.
- 9. The correspondence group further considered the five existing options (including the modifications to options 3 and 5) plus the new option, in a conference call on 30th November 2011.
- 10. The conference call participants agreed not to progress options 1, 2 and 4 (as detailed in Annex 2) on the basis that:
- (a) Option 1 Does not include the use of a hazard pictogram (pictogram considered important for communication in that it serves as a quick visible reminder that need to take care when handling the product); Difficulty with defining 'consumer sector; Competent authority option thus will lead to disharmonisation; Will create labelling differences between consumers and professional users.
- (b) Option 2 Need to distinguish between workplace and consumer use products (substantial overlap in products that are used in workplaces and by consumers); Prefer to have the same hazard communication between the two sectors and avoid any confusion.
- (c) Option 4 Concerns over the introduction of a novel pictogram at this late stage of international adoption/implementation of the GHS and the consequential changes associated with this option.

- 11. Regarding option 4, the conference call participants noted the potential implementation issue arising in the situation where the corrosion pictogram on products classified Eye damage category 1, appears on the outer packaging but the product is not classified as corrosive for transport. The conference call participants agreed this is a separate implementation issue thus should be removed from the discussion and further consideration by this correspondence group.
- 12. During discussions on option 5 and the proposed modification, it was suggested to replace the corrosion pictogram in GHS Table 2.16.2 with an exclamation mark pictogram. See further explanations in Annex 1.
- 13. The conference call participants agreed to further consider the following options at the correspondence group meeting on 8th December 2011 option 3 and the proposed modification, option 5 and the proposed modifications, and option 6.

Next steps

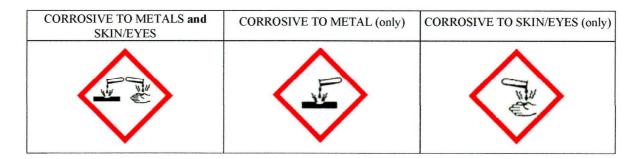
14. The correspondence group would welcome comments from the Sub-Committee on the potential options set out in Annex 1.

Annex 1

Modified/new possible options for a permanent solution to address the identified issues associated with the adoption of the hazard class 'corrosive to metals' in the supply/use sector.

Option 3

Different pictograms (as proposed by France in INF.22 – merit to distinguish the two hazards) e.g.:



PRO-

- (i) Easy to distinguish between those substances/mixtures corrosive to skin (and hence by implication corrosive to metals) and those only corrosive to metals but not corrosive to skin.
- (ii) Emergency responders would know instantly what type of hazard i.e. physical or health may adopt different approach if know that only dealing with corrosive to metals rather than corrosive to skin.
- (iii) No need to differentiate between consumer and workplace.
- (iv) Pictogram appears on the label pictogram considered important for communication in that it serves as a quick visible reminder that need to take care when handling the product.

CON-

- (i) More pictograms could be managed if precedence rules established thereby reducing the number of pictograms required on a label.
- (ii) Difficult to introduce new pictograms.
- (iii) Changes may impact on the transport sector will need to dialogue with transport colleagues (alternatively, could just adopt the different corrosion pictograms for supply i.e. consumer and workplace).
- (iv) Potential costs associated with having to change pictograms on a wide range of substances and mixtures that carry the existing corrosive pictogram however, costs could be mitigated if use of the 'split' pictograms were to be optional for suppliers.

Proposed modification to option 3:

A competent authority may choose to allow a modified corrosion pictogram on the label of the immediate container of a product that is classified corrosive in accordance with only a) Chapter 2.16, or b) Chapters 3.2 and/or 3.3, but not both a and b, unless that label must also display a UN Model Regulations on the Transport of Dangerous Goods pictogram for corrosivity. The modified corrosion pictogram would display, in the case of a product classified corrosive in accordance with Chapter 2.16 but not 3.2 or 3.3: the corrosive to metal(only) symbol, and, in the case of a product classified in one or both of Chapters 3.2 and 3.3, but not 2.16: the corrosive to skin/eyes(only) symbol.

PRO -

- (i) to (iv) (same as currently listed for option 3 above)
- (v) No need to make modifications to any existing labels or even future labels, if not desired. Suppliers could continue to choose to use the combined pictogram even if authorities allowed them the choice of using the separated pictogram.
- (vi) No changes required by the transport sector. Transport labels would continue to bear the same (combination) pictogram.

CON-

- (i) More pictograms.
- (ii) Difficult to introduce new pictograms.
- (iii) Inconsistency between suppliers that choose to use the separate pictogram and those that do not.

Option 5

Delete the hazard pictogram label element completely in Chapter 2.16 (with consequential amendments throughout the GHS).

The signal word and hazard statement would remain and be applied throughout the "supply/use" sector including consumers.

Table 2.16.2 would be modified accordingly:

Table 2.16.2: Label elements for substances and mixtures corrosive to metals

	Category 1			
Symbol	No symbol			
Signal word	Warning			
Hazard statement	May be corrosive to metals			

PRO-

- (i) Hazard 'Corrosive to Metals' is communicated throughout the 'supply & use' sector including consumers.
- (ii) No need to tackle the difficulties with defining a 'consumer sector' many products sold as consumer products are also used professionally and in the workplace. For instance, the same product may be sold to, and used by, both consumers and professional users in which case differentiated labelling would cause disharmonisation and confusion.

(iii) Nothing changes for the transport sector i.e. the warning label for transport is retained and remains unchanged (GHS Annex 1 table would still show the transport pictogram).

CON-

(i) No pictogram on the label – pictogram considered important for communication in that it serves as a quick visible reminder that need to take care when handling the product.

Proposed modification 5a:

Option only to be used for substances and mixtures with definitive data to support that the substance or mixture is only classified corrosive to metal and not corrosive to skin or eyes.

If this option is to be progressed, it is suggested to use the exclamation mark symbol rather than no symbol. The use of a hazard pictogram is considered vital for hazard communication in instances where there may be a language or literacy barrier and it may also draw attention to the hazard statement.

Proposed modification 5b:

Replace the corrosion pictogram in GHS Table 2.16.2 with an exclamation mark pictogram.

Rationale:

- a) The hazard class Corrosive to Metals currently has the corrosion pictogram with the signal word 'Warning' whereas Skin corrosion category 1 and Eye damage category 1 has the corrosion pictogram with the signal word 'Danger' suggest this could be confusing for the consumer;
- (b) The corrosion pictogram is the only pictogram that applies to both a health hazard and a physical hazard;
- (c) The corrosion pictogram in the supply and use sector should only be used for Skin corrosion category 1 and Eye damage category 1;
- (d) The exclamation mark and signal word 'Warning' is also used for 'Dangerous to the ozone layer';
- (e) A switch to the exclamation mark for the supply and use sector would not impact on transport as they could continue to use their version of the corrosion pictogram for products corrosive to metals.

Proposed modification 5c:

Permit omission of the corrosion pictogram arising from classification as *Corrosive to metals* where the container size is less than 5 litres (i.e. where limited quantity provisions in transport apply).

This option is linked to option 5 and proposed as a possible compromise to address the concerns arising from the complete removal of the pictogram, including in the workplace sector where larger quantities may be supplied. A similar option was presented initially by

AISE when it first raised the problem in document UN/SCEGHS/19/INF31. If necessary this compromise option could include discretion for competent authorities to allow the corrosion pictogram associated with *Corrosive to metals* to be omitted for a specified limited quantity.

The 'pros' of this approach would be as now for option 5. The existing 'con' for option 5 (no pictogram on the label) would be mitigated such that this only applied for packages < 5 litres where the product is not also classified as Skin corrosion category 1 or Eye damage category 1. A potential further 'con' that this might open the way to other limited quantity exemptions for supply could be countered by making clear that this does not set a precedent.

If this compromise option finds favour, suitable text could be developed to make clear the limited circumstances in which the pictogram associated with *Corrosive to metals* could be omitted, the special circumstances that apply so this does not set a precedent to apply similar exemptions to other hazard classes, and to emphasise the need to include on the label the other pictograms that arise from classification of the substance or mixture in any other hazard class.

Option 6

Delete the sentence in GHS 1.4.10.5.5 altogether and revert back to the 3rd revised edition of the GHS in this part.

Rationale: Labelling for the hazard class 'Corrosive to Metals' in reality appears to be a minor issue. A search in the EU CLP Regulation Annex VI revealed only one entry with classification 'Corrosive to Metals' but not Eye damage category 1 or Skin corrosion category 1 (H290 but not H318 or H314).

However, it was noted that 'Corrosive to Metals' was not used in the EU system for supply prior to the adoption relatively recently of CLP, thus it is not surprising that very few substances have this harmonised classification in CLP. Moreover, it was also noted the problem mainly arises for mixtures which would not be listed in the CLP harmonised list.

Annex 2

Existing possible options for a permanent solution which the correspondence group propose not to progress.

Option 1

Make the current competent authority option in GHS 1.4.10.5.5 (as adopted by the Sub-Committee in Dec 2010) the permanent solution

Rationale:

Label elements not a building block; however certain exceptions made for transport (e.g. GHS 1.1.3.1.2 "...such elements as signal words and hazard statements are not expected to be adopted in the transport sector."; GHS 1.4.1.5 "...UNSCETDG may choose not to include as signal words and hazard statements as part of the information included on the label...") thus why not for consumers?

PRO -

- (i) Allows the various sectors to select label elements appropriate to the sector e.g. the workplace sector can retain the pictogram.
- (ii) The hazard corrosive to metals is still communicated on the label for consumer products via the hazard and precautionary statements.
- (iii) Nothing changes for the transport sector.

CON -

- (i) Could lead to different labelling in different countries if competent authorities have freedom of choice to allow the labelling exemption.
- (ii) Need to define 'consumer sector' many products sold as consumer products are also used professionally and in the workplace. For instance, the same product may be sold to, and used by, both consumers and professional users in which case differentiated labelling would cause disharmonisation and confusion.
- (iii) No pictogram on the label pictogram considered important for communication in that it serves as a quick visible reminder that need to take care when handling the product.

Option 2

Insert a clear statement that the hazard class Corrosive to Metals is not relevant for consumers i.e. statement in Annex 1 to the GHS along the lines of the statement "Not required under the UN Model Regulations" which appears in certain hazard classes/categories.

"Not required under the UN Model Regulations" is included for the following hazard classes/categories – Flammable Gases Cat. 2, Flammable Liquids Cat. 4, Self-Reactive Substances and Mixtures Type G, Organic Peroxides Type G, Acute Toxicity Oral/Skin/Inhalation Cat. 4 / Cat. 5, Skin Corrosion/Irritation Cat. 2/Cat. 3, Serious Eye Damage/Eye Irritation, Respiratory Sensitisation, Skin Sensitisation, Germ Cell Mutagenicity, Carcinogenicity, Toxic to Reproduction, STOT (Single Exposure), STOT

(Repeated Exposure), Aspiration Hazard, Aquatic Hazard (Acute) Cat. 2/Cat. 3, Aquatic Hazard (Long-Term) Cat. 3/Cat. 4, Hazardous to the Ozone Layer.

Annex 1 entry for Corrosive to Metals could be something along the lines of:

CORROSIVE TO METALS						
Category 1	-	-	-	Note		
Warning May be corrosive to metals	-	-	-	Under the UN Recommendations on the Transport of Dangerous Goods, Model Regulations, pictogram colours: Symbol (corrosion): black; background: upper half: white; lower half: black with white border; Figure "8" in the bottom corner: white.		
8						
Not required for substances and mixtures which are in the finished state, packaged for consumer use.						

Rationale:

GHS 1.1.3.1.5.3 "While physical hazards are important in the workplace and transport sectors, consumers may not need to know some of the specific physical hazards in the type of use they have for a product."

PRO -

- (i) Clear statement that corrosive to metals is not relevant for consumer products helps competent authorities identify relevant building blocks when developing their legislation implementing GHS.
- (ii) All labelling elements retained for the workplace.
- (iii) Nothing changes for transport.

CON-

- (i) Talks about consumer use sometimes difficult to differentiate between consumer and professional. Many products sold as consumer products are also used professionally and in the workplace could potentially end up with a consumer product with no hazard communication about corrosive to metals being used professionally.
- (ii) No hazard communication regarding corrosive to metals on consumer products.

Option 4

Add a new pictogram to distinguish "corrosive to eye" to those presented in Option 3 above

Issue:

Various permutations of corrosivity

- (i) corrosive to metals but not corrosive to skin/eyes,
- (ii) corrosive to skin/eyes and corrosive to metals, and
- (iii) corrosive to eyes but not corrosive to skin or metals e.g. some surfactants.

Current corrosive pictogram gives no indication of eye damage yet is assigned to Eye Cat 1 i.e. substances/mixtures not corrosive to skin or corrosive to metals. Suggest a different pictogram is needed for substances and mixtures only classified as Eye Cat 1 e.g. something along the lines of:



PRO-

Easy to distinguish between those substances/mixtures corrosive to eyes but not corrosive to skin or metals.

CON-

- (i) More pictograms could be managed if precedence rules established thereby reducing the number of pictograms required on a label.
- (ii) Difficult to introduce new pictogram.

Consequential changes:

Should different pictograms be adopted for the various types of corrosivity, some additional text will be required for GHS 1.4.10.5.3.1 "Precedence for the allocation of symbols".