### UN/SCEGHS/18/INF.22

# 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

Eighteenth session, Geneva, 9-11 December 2009 Items 4 and 6 (c) of the provisional agenda

Work of the Sub-Committee of Experts on the Transport of Dangerous Goods

#### Note by the secretariat

#### INTRODUCTION

- 1. This document contains the excerpts of the draft report of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) on its thirty-sixth session, on the following matters of concern to the GHS:
  - (a) Pictogram for gases under pressure
  - (b) Further alignment of corrosivity criteria in Class 8 of the UN Model Regulations with GHS criteria

**Note:** This issue was discussed at working group level, with participation of experts of the GHS Sub-Committee. The report of the working group and its conclusions, endorsed by the Sub-Committee were circulated as -CRP.4/Add.6 and are reproduced in this document for ease of reference.

2. No proposals for amendment to the GHS text in relation with any of the items mentioned in (a) to (d) above have been made.

#### OUTCOME OF THE WORK OF THE TDG SUB-COMMITTEE ON ITS 35th SESSION

#### **HAZARD COMMUNICATION**

A. Pictograms for gases under pressure

<u>Document</u>: ST/SG/AC.10/C.3/2009/52 (Germany, United Kingdom and EIGA)

The Sub-Committee noted that this proposal was intended for the Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (GHS Sub-Committee) and that it was not likely to affect the labelling system of the Model Regulations on the Transport of Dangerous Goods.

(Ref.doc: ST/SG/AC.10/C.3/2009/CRP.1/Add.10, par.98)

## B. Further alignment of corrosivity criteria in Class 8 of the UN Model Regulations with GHS criteria

The issue was discussed at working group level, with participation of experts of the GHS Sub-Committee. The report of the working group and its conclusions, endorsed by the Sub-Committee, are reproduced hereafter.

- "1. In accordance with the decision of the Sub-Committee at its last session (ST/SG/AC.10/C.3/70) para 82 ...) a working group on corrosivity criteria was convened during the 36<sup>th</sup> session of the Sub-Committee, under the chairmanship of the Vice-Chairman, Mr C. Pfauvadel (France), to discuss the proposal by the expert from the Netherlands (ST/SG/AC.10/C.3/2009/15) to align the criteria of Chapter 2.8 of the UN Model Regulations on the Transport of Dangerous Goods concerning corrosive substances with those of Chapter 3.2 (skin corrosion/irritation) of the third revised edition of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
- 2. The following documents were discussed:

Documents: ST/SG/AC.10/C.3/2009/15 (Netherlands)

ST/SG/AC.10/C.3/2009/49 (DGAC)

ST/SG/AC.10/C.3/2009/50 (United Kingdom)

<u>Informal documents</u>: 35/INF.3 (Netherlands)

INF.6 (Secretariat) INF.15 (DGAC) INF.17 (Netherlands) INF.18 (CEFIC) INF.36 (Germany) INF.45 (Australia)

- 3. The Working Group noted that the criteria currently contained in the UN Model Regulations on the Transport of Dangerous Goods were not in contradiction with those of the GHS, in the sense that:
  - (a) The transport regulations addressed only corrosivity, not irritation;
  - (b) The criteria for corrosivity based on test results were the same as those for Category 1 in the GHS, packing groups I, II and III corresponding to sub-categories 1A, 1B and 1C of the GHS.
- 4. Several delegations considered that it was not necessary to introduce the full text of the GHS related to corrosivity for the following reasons:
  - (a) The GHS allows classification of substances as corrosive on the basis of a conservative approach, according to which substances presenting extreme pH values may be considered as corrosive without further testing. This may cause confusion because this can lead to default classification of certain substances into Class 8, packing group I, although such substances may prove not to be corrosive at all after testing. In addition, the use of the GHS pH criterion alone is not appropriate for the assignment to packing groups or GHS sub-categories;
  - (b) The GHS classification criteria for mixtures can lead to more stringent classification than classification based on the test results.
- 5. This GHS conservative approach, intended to allow the industry to classify their products more stringently without the need for testing, would be likely to bring confusion if not properly explained to transport operators. In particular safety data sheets (SDSs) provided to the carriers and showing extreme pH values could lead them to question the classification provided by the consignor on the basis of test results.

- 6. GHS experts participating in the working group session clarified that:
  - (a) A substance classified as corrosive on the basis of extreme pH values could be considered as non-corrosive on the basis of test results;
  - (b) The fact that a substance did not possess an extreme pH value did not mean that it was not corrosive.
- 7. In this respect, it was mentioned that OECD guideline 404, which is referred to in the UN Model Regulations, states that substances with an extreme pH value may be considered as corrosive without further testing. The working group felt that this was not correct and that the wording of this guideline should be amended to reflect more precisely how to deal with such situations for classification purposes.
- 8. Similarly, it was clarified that test results always override the calculation methods indicated in the GHS for classification of mixtures.
- 9. The expert from the Netherlands raised the question whether a classification method such as the calculation method for mixtures could be considered as a separate block in the building block approach.
- 10. The understanding of the working group was that classification methods were not separate blocks in the building block approach, and that all methods leading to classification in a given block were part of the same block.
- 11. It was also noticed that different classification lists had, for the time being, been issued, e.g. in the transport regulations and the European legislation for supply and use, which were based on different classification methods. These lists showed different classifications for the same concentrations of corrosive substances in solution. This put into question the effectiveness of the GHS for bringing intersectoral or worldwide harmonization. The transport of dangerous goods list was supposed to be based on test results, although some substances had been classified a long time ago most probably on the basis of experience. Other lists have been developed either on the basis of test results or of conservative approaches. At this time, the GHS Sub-Committee had not yet addressed this question of validating the classification of individual substances and it would be useful to consider this in future, at least for those substances which are most commonly carried as listed in the UN Model Regulations.
- 12. As a conclusion, the working group considered that:
  - (a) There was no need to reproduce in full the GHS text in the UN Model Regulations because the criteria contained therein were in line with the GHS;
  - (b) Chapter 2.8 of the UN Model Regulations should be amended to underline the correlation between transport packing groups I, II and III and GHS sub-categories 1A, 1B and 1C;
  - (c) Notes should be included to explain the applicability and limitations of the use of extreme pH values, calculation methods for mixtures and bridging principles to deduce classification and their relationship with transport criteria.
- 13. The expert from the Netherlands would prepare a proposal of amendment to Chapter 2.8 in consultation with interested delegations.
- 14. The representative of ICCA drew attention to the fact that the notion of bridging principles had already been introduced in Chapter 2.9 of the UN Model Regulations in relation to classification of environmentally hazardous substances. As this principle was also relevant for corrosivity and toxicity, she wondered whether it should be included in Chapter 2.0 of the UN Model Regulations rather than being repeated in several class specific chapters.

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15. Some experts were of the view that this bridging principle was only valid for health and environmental hazards, and that it should not be applied to physical hazards. In addition, according to the decisions taken, it would not be introduced in Chapter 2.8 and the question of alignment of section 2.6.1 concerning acute toxicity with the GHS text was still under discussion. This would therefore remain an open question depending on further discussions on how to better align the UN Model Regulations on the Transport of Dangerous Goods classification criteria with those of the GHS.".

(Ref.doc: ST/SG/AC.10/C.3/2009/CRP.3/Add.11, para. 105 and -CRP4/Add.6, as amended)

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