

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

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Item 2 of the provisional agenda

UPDATING OF THE SECOND REVISED EDITION OF THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS)

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

Note by the secretariat

1. Introduction

This document contains the relevant conclusions and excerpts of the draft report of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) on its thirty-fourth session, on issues relating to the GHS. These include the following items:

- (a) Self-heating substances and mixtures;
- (b) Chemically unstable gases;
- (c) Additional tests for the classification of 1.4S explosives
- (d) Screening test for substances which may have explosive properties and consequential changes
- (e) Desensitized explosives
- (f) Implementation of GHS corrosivity criteria into Class 8 of the UN Model Regulations;
- (g) Reference to OECD Test Guideline 404
- (h) Substances which, in contact with water, emit toxic gases
- (i) Classification of hazardous to the aquatic environment: consequential amendments to Class 9 (Chapter 2.9 of the UN Model Regulations)

Proposals for amendment to the GHS text in relation to items (a), (c) and (d) are contained in the annex to this document.

2. Outcome of the work of the TDG Sub-Committee on its thirty-fourth session

(a) Self-heating substances and mixtures

Document: ST/SG/AC.10/C.4/2008/20 - ST/SG/AC.10/C.3/2008/79 (Germany)
Informal document: UN/SCEGHS/16/INF.28 - UN/SCETDG/34/INF.68 (Germany)

The TDG Sub-Committee adopted the amendments to 2.4.3.1.2 of the UN Model Regulations contained in proposal 2 of INF.68 with some modifications.

The GHS Sub-Committee is invited to consider the consequential amendments to the note under the definition of self-heating substances and mixtures (Chapter 2.11), which is reproduced in the annex to this document.

(Ref.doc: ST/SG/AC.10/C.3/2008/CRP.3/Add.9, par.106 and -2008/CRP.3/Add.10)

(b) Chemically unstable gases

Informal document: UN/SCEGHS/16/INF.19 – UN/SCETDG/34/INF.45 (Germany)

The Sub-Committee took note of the progress report on the work of the informal working group on chemically unstable gases and agreed that the work should be pursued in the next biennium.

(Ref.doc: ST/SG/AC.10/C.3/2008/CRP.3/Add.9, par.107)

(c) Additional tests for the classification of 1.4S explosives

Informal documents: UN/SCETDG/34/INF.26
UN/SCETDG/34/INF.54

At its fifteenth session, the Sub-Committee was informed that the TDG Sub-Committee had adopted a number of amendments to some of the tests contained in the Manual of Tests and Criteria. It was reported at that time that these amendments did not imply any consequential amendment to the text of the GHS (see ST/SG/AC.10/C.4/30 par.15).

However, when preparing the consolidated list of amendments to the second revised edition of the GHS and to the fifteenth revised edition of the UN Model Regulations, the secretariat noticed that some of the adopted amendments to the Manual of Tests and Criteria did have a direct impact on Chapter 2.1, figure 2.1.3 of the GHS. This was brought to the attention of the TDG Sub-Committee in information document UN/SCETDG/34/INF.26.

The TDG Sub-Committee agreed that the secretariat's comments in informal document INF.26 were relevant and asked a small group of explosives experts to examine them. The group's conclusions (INF.54) and proposed amendments were adopted.

The consequential amendments to the GHS text are reproduced in the annex to this document.

(Ref.doc: ST/SG/AC.10/C.3/2008/CRP.3, par.10 and -/C.3/2008/CRP.4/Add.2)

(d) Screening test for substances which may have explosive properties and consequential changes

Document: ST/SG/AC.10/C.3/2008/78 (ICCA)

The proposal to amend the Manual of Tests and Criteria by establishing the conditions under which it is not necessary to conduct certain Series 1 or Series 2 tests was adopted with some editorial amendments (see ST/SG/AC.10/C.3/2008/CRP.4/Add.1).

The representative of ICCA was requested to bring those amendments to the attention of the GHS Sub-Committee. The proposed amendments to the GHS text were circulated as document UN/SCETDG/34/INF.59. The proposal for amendment to Chapter 2.1 of the GHS, including the editorial amendments adopted by the TDG Sub-Committee, which were not taken into account in INF.59, is reproduced in the annex to this document.

(Ref.doc: ST/SG/AC.10/C.3/2008/CRP.3/Add.1, paras. 25 and 26)

(e) Desensitized explosives

Document: ST/SG/AC.10/C.4/2008/9 - ST/SG/AC.10/C.3/2008/39 (Netherlands)

At its fifteenth session, the Sub-Committee took note of the report of the informal working group on desensitized explosives and was informed that the group intended to meet in parallel to the thirty-fourth session of the TDG Sub-Committee. The Sub-Committee agreed that the informal working group should continue to provide progress reports on the on-going work until a formal proposal is ready to be submitted for consideration by both Sub-Committees (see ST/SG/AC.10/C.4/30, paras. 13-14)

The working group on desensitized explosives met on 8 and 9 December, in parallel to the TDG meeting. The working group's report will be reproduced in the annex to the report of the TDG Sub-Committee on its thirty-fourth session (ST/SG/AC.10/C.3/68/Add. ...). It will not be discussed until the next biennium.

(Ref.doc: ST/SG/AC.10/C.3/2008/CRP.3, paras. 13 and 14)

(f) Implementation of GHS corrosivity criteria into Class 8 of the UN Model Regulations

Documents: ST/SG/AC.10/C.3/2008/48 (Netherlands)
ST/SG/AC.10/C.3/2008/83 (Netherlands)

Informal documents: INF.17 (33rd session) (Netherlands)
INF.19 (Netherlands)

The Sub-Committee supported unanimously the need for harmonization with the GHS. Nevertheless, some experts and representatives of non-governmental organizations expressed concern at the proposal by the Netherlands to revise the text concerning corrosivity criteria in the current Model Regulations in order to make it fully consistent with the terminology used in the GHS.

On the one hand, they felt that the current text was already consistent with the GHS and they were not convinced that there was a need for change. On the other hand they felt that the proposal by the Netherlands would extend the scope of the transport regulations to substances which are not currently regulated as corrosive for transport. They felt that more time was needed to evaluate the consequence of the proposal changes in the transport sector.

The expert from Netherlands explained that there was no intent to bring any change to the current scope of the UN Model Regulations. The proposal consisted in referring to the building blocks of the GHS that corresponded to the criteria in the UN Model Regulations.

It was agreed to defer that issue to the next biennium. Delegations who had expressed concern were invited to provide concrete explanations. Those who considered that the building blocks in the GHS were not suitable for application in the transport sector were also invited to explain their concerns and to submit proposals to the GHS Sub-Committee.

(Ref.doc: ST/SG/AC.10/C.3/2008/CRP.3/Add.9, paras. 101-104)

(g) Reference to OECD Test Guideline 404

Informal document: UN/SCETDG/INF.50 (Secretariat)

The proposal to update the reference to OECD Test Guideline 404 (from the 1992 to the 2002 edition) was adopted.

(Ref.doc: ST/SG/AC.10/C.3/2008/CRP.3/Add.9, par. 105 and -C.3/2008/CRP.4/Add.10)

(h) Substances which, in contact with water, emit toxic gases

Document: ST/SG/AC.10/C.3/2008/68 (France and Germany)

Informal document: UN/SCETDG/34/INF.44 (Germany)

Bearing in mind that the GHS Sub-Committee had decided to defer the work on improvement of test method N.5 of the Manual of Test and Criteria to this Sub-Committee to make it suitable for measurement of very low emission rates of toxic gases, the Sub-Committee agreed to set up an ad hoc intersessional correspondence group to this effect and include this subject in the work program for the next biennium.

(Ref.doc: ST/SG/AC.10/C.3/2008/CRP.3/Add.9, par. 105 and -C.3/2008/CRP.4/Add.10)

(i) Classification of hazardous to the aquatic environment: consequential amendments to Class 9 (Chapter 2.9 of the UN Model Regulations)

Informal document: UN/SCETDG/34/INF.28 (Secretariat)

The TDG Sub-Committee adopted the amendments to Chapter 2.9 of the UN Model Regulations proposed by the secretariat in INF.28. The amendments were intended to align the classification criteria in the UN Model Regulations with the new criteria for chronic hazards adopted by the GHS Sub-Committee during the current biennium.

Annex

Proposals for amendments to the GHS text

Chapter 2.1:

2.1.4.2.1 Amend the NOTE in 2.1.4.2.1 to read as follows (new text is underlined):

“NOTE: Neither a Series 1 type (a) propagation of detonation nor a Series 2 type (a) test of sensitivity to detonative shock is required if the exothermic decomposition energy of organic materials is less than 800 J/g. For organic substances and mixtures with a decomposition energy of 800 J/g or more, tests 1 (a) or 2 (a) do not have to be performed if the outcome of the Ballistic Mortar MK.IIID test (F.1), or Ballistic Mortar (F.2) or the BAM Trauzl test (F.3) with initiation by a standard No.8 detonator (see Appendix 1 to the Manual of Tests and Criteria) is “no”. In this case, the results of test 1(a) and 2(a) are deemed to be “-”.”

(Ref.doc: UN/SCETDG/34/INF.59 as amended by ST/SG/AC.10/C.3/2008/CRP.4/Add.1)

Chapter 2.11:

2.11.1 Amend the Note under the definition of self-heating substances and mixtures to read as follows:

“Note: Self-heating of a substance [or mixture] is a process where the gradual reaction of that substance with oxygen (in air) generates heat. If the rate of heat production exceeds the rate of heat loss, then the temperature of the substance [or mixture] will rise which, after an induction time, may lead to self-ignition and combustion.”

Note by the secretariat: *Current text in the GHS refers to “substances or mixtures”. The Sub-Committee may wish to keep it as it is or to delete the word “mixtures”.*

The Sub-Committee may also wish to consider whether or not the term “spontaneous ignition temperature” in note 2 to table 2.11.1 should be replaced by “self-ignition temperature”.

Chapter 2.1

Figure 2.1.3 Replace current figure with the following:


