

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 July 2016

Thirty-first session

Geneva, 5– 8 July 2016

Agenda items 2 and 3 (a), (f)

Work of the Sub-Committee of Experts on the Transport of Dangerous Goods on its 49th session on matters of interest to the GHS Sub-Committee

Note by the secretariat

Introduction

1. The TDG and GHS sub-committees agreed at its last session to address issues of common concern during a joint session. The agenda for the joint session will cover part of the issues listed under agenda item 2 (explosives and related matters) and agenda item 10 (issues relating to the GHS) of the TDG Sub-Committee agenda.
2. Most of the questions on explosives and related matters under agenda item 2, as well as the documents under agenda item 10 (g) relating to the use of the Manual of Tests and Criteria in the context of the GHS were referred to the Working Group on Explosives which met from 27 June to 1 July 2016 under the chairmanship of Mr. Ed de Jong (Netherlands). The full report of the Working Group on Explosives including the outcome of the discussions has been circulated as INF.66 at the 49th session of the TDG Sub-Committee¹.
3. The TDG Sub-Committee endorsed the conclusions of the Explosives Working Group with some exceptions and additional comments (Refer to ST/SG/AC.10/C.3/2016/CRP.1/Add.9, paragraphs 83–86). These conclusions will be included in the final report of the TDG Sub-Committee as appropriate.
4. The sections of the draft report of the TDG Sub-Committee on its 49th session reproduced in this document are reproduced as initially drafted by the secretariat. They may be subject to amendments during the adoption of the report (tentatively scheduled on Wednesday 6 July). The final version of the report will be circulated as document ST/SG/AC.10/C.3/98².

Outcome of the discussions at the TDG Sub-Committee

5. The sections of the report of the Explosives Working Group and of the draft report of the TDG Sub-Committee on its 49th session on matters of interest to the GHS Sub-Committee are reproduced below for information of the GHS Sub-Committee.

¹ Available at: <http://www.unece.org/trans/main/dgdb/dgsubc3/c3inf49.html>

² <http://www.unece.org/trans/main/dgdb/dgsubc3/c3rep.html>

6. For ease of reference, the proposed consequential amendments to the GHS are reproduced in the Annex to this document.

Issues submitted for consideration by both sub-committees

7. Revision of Chapter 2.1 of the GHS (GHS agenda item 2)

Documents: ST/SG/AC.10/C.3/2016/7 - ST/SG/AC.10/C.4/2016/2 (AEISG)
ST/SG/AC.10/C.3/2016/47 - ST/SG/AC.10/C.4/2016/10 (SAAMI)

Informal documents: TDG/49/INF.15 - GHS/31/INF.5 (AEISG)
TDG/49/INF.45 - GHS/31/INF.12 (Canada)
TDG/49/INF.37 - GHS/31/INF.10 (Sweden)

Discussion: The papers other than 49/INF.37 provide comments and suggestions for solving problems identified by the ICG and reported in 49/INF.37. 49/INF.37 served as the basis for discussion, which was in particular focused on the GHS labelling of explosives. It was recognized that some of the problems encountered originate from an unclear definition of the scope and applicability of the GHS to the life cycle of explosives, and the working group agreed that this needs to be reviewed and clarified. In order to overcome the package-dependence of current GHS labelling elements, the working group discussed a generalization of the GHS label requirements presented in GHS Table 2.1.2, with some variations. This generalization acknowledges that detailed information on the hazard of explosives when they are not in the transport configuration is included by the manufacturer in the safety data sheet.

The working group considered the use of the term “unstable explosives” within Chapter 2.1 and concluded that the term is technically incorrect as what is being identified are explosives that fail Test Series 3 (substances) or 4 (articles), i.e., unsuitable for transport, but may remain suitable for other purposes.

The working group advanced the idea that all explosive divisions other than 1.4 and the category currently termed unstable explosives should bear the exploding bomb pictogram, the signal word “Danger” and the hazard statement “Explosive”. For Division 1.4, there was no consensus on the most appropriate labelling, but the idea of separating out from this Division those substances, mixtures and articles that also without (transport) packaging pose only a minor hazard was generally accepted. The exemption list is yet to be agreed, but a draft list based on UN-numbers for transport was developed. The USA was not supportive, and the UK agreed, of a list based only on UN numbers unless additional parameters were put in place to cover the wide variety of packaging possibilities.

The idea of introducing GHS Categories in the classification of explosives was discussed, which would also replace the denotation “unstable explosive” with Category 1.

Conclusion: The above will be discussed at a dedicated meeting during the session of the GHS-subcommittee and work will continue to refine the issues reported above as well as others identified in the papers listed under this section, resulting in proposals for the next session.

Ref.Doc: Report of the Explosives Working Group to the TDG Sub-Committee, INF.66 (49th session), para.14

8. Use of the Manual of Tests and Criteria in the context of the GHS (GHS agenda item 2)

Informal documents: TDG/49/INF.4 - GHS/31/INF.3 (Working Group Chair)
and Adds. 1 to 5
TDG/49/INF.6 - GHS/31/INF.4 (Canada, FEA)

“Conclusion: It was determined to create text in Part I of the Manual to clarify the intent that the configuration is most often the transport package and no additional testing is required for other sectors. The working group completed its review of 49/INF.4 and Section 10 within 49/INF.4/Add.1. The work will continue in the intercessional period and will include continuing the review of the rest of Add.1, review of Add.2 – Add.5, development of a chapter to describe in general terms how to use the manual in GHS efforts and to explain the importance of packaging for certain explosives classifications.”

Ref.Doc: Report of the Explosives Working Group to the TDG Sub-Committee, INF.66 49th session), para.23

Other issues of interest to the GHS Sub-Committee considered by the TDG Sub-Committee

9. Clarification of the classification criteria for desensitised explosives in GHS (GHS agenda item 3 (f))

Document: ST/SG/AC.10/C.3/2016/30 - ST/SG/AC.10/C.4/2016/6 (AEISG, SAAMI)

Discussion: AEISG and SAAMI have indicated that some regulatory authorities have misconstrued the intent of GHS section 2.17.2.1 to mean that it applies “... to the explosive in its non-desensitised state. For example, paragraph (a) has been interpreted that wet TNT (UN 1356) that meets the test criteria must nevertheless be classified as an explosive because the intent is to later remove the desensitiser and use the material as an explosive.” In 2016/30, AEISG and SAAMI are seeking to correct this misconception with some revisions to section 2.17.2.1.

There was general support for the problem described by AEISG and SAAMI; however, the working group was of the opinion that the proposed revisions to GHS section 2.17.2.1 were too difficult to understand. SAAMI provided some revised text to amend the proposal in 2016/30 and that was accepted by the working group. The working group noted that acceptance of this proposal would also require a consequential amendment in Note 1 of section 2.17.2.1.

New Zealand noted that similar wording is also found in Section 51 of the Manual. The working group took note of this and suggested a consequential amendment to that section.

Conclusion: The working group unanimously accepted the proposals in 2016/30 as modified by SAAMI as well as the consequential amendment to Note 1. See Amendment 1 in Annex 4 of this report³. A consequential amendment is required in Section 51 of the Manual. See Amendment 7 in Annex 3 of this report.”

Ref.Doc: Report of the Explosives Working Group to the TDG Sub-Committee, INF.66 49th session), para.24.

³ **Note by the secretariat:** refers to the report of the Working Group on Explosives. For ease of reference, the proposed amendments to the GHS are also reproduced in the Annex to this document.

10. Clarification relating to the test method for readily combustible solids (Test N.1)

Document: ST/SG/AC.10/C.3/2016/5 (Germany)
Informal document: TDG/49/INF. 54 (USA)

“15. In the light of explanations from the United States of America, the Sub-Committee decided to adopt the amendments proposed for 33.2.1.4.4.1, 33.2.1.4.4.2 and 33.2.1.4.4.3 of the Manual of Tests and Criteria, but with the replacement of “(250 mm)” with “(100 mm)”. Those amendments were placed in square brackets for confirmation at the next session (see annex...)”.

(Ref.Doc: Draft report of the TDG Sub-Committee on its 49th session, ST/SG/AC.10/C.3/2016/CRP.1/Add.1 para.15 and ST/SG/AC.10/C.3/2016/CRP.2, page 2)

Note by the secretariat: Although not addressed in the documents discussed by the TDG Sub-Committee, the secretariat notes that in case the proposed amendment to 33.2.1.4.4.1 entails a consequential amendment to paragraph 2.7.2.2 of the GHS as follows:

Consequential amendments to the GHS

“2.7.2.2 Powders of metals or metal alloys shall be classified as flammable solids when they can be ignited and the reaction spreads over the whole length of the sample [100 mm] in 10 min or less”.

Experts are invited to consider whether additional consequential amendments to the GHS are needed in case the amendments to the Manual are confirmed.

11. Corrosivity criteria (Revision of Chapter 2.8)

Document: ST/SG/AC.10/C.3/2016/21 and Corr.1 (Canada, CEFIC and AISE)
Informal document: INF.40 (CEFIC and AISE) and INF.65 and Corr.1 (Canada, CEFIC and AISE, on behalf of the lunchtime working group)

“21. Several experts were in favour of revising Chapter 2.8 as proposed. In the view of some experts, though, a few points still required clarification. They included, for instance, the classification procedures, as the calculation method resulted in a stricter classification than the one produced by the currently used criteria; the supplementary texts introduced from the GHS and possible deviation from the GHS, specifically in the introduction and definitions; and the possibility that the industry would draw up guidelines for the practical application of such new provisions relating to classification.

22. It was agreed to convene a lunchtime working group to study such points and the details of the proposed text.

60. The Sub-Committee adopted the revised text of Chapter 2.8 as it appeared in informal document INF.65/Corr.1. The issues placed in square brackets would be resolved at the next session, taking into consideration the decisions of the GHS Sub-Committee relating to the GHS texts on corrosivity, which were also under discussion. CEFIC would prepare for the next session the examples and explanations mentioned under 2.8.4.3.3 of the document.”

(Ref.Doc: Draft report of the TDG Sub-Committee on its 49th session, ST/SG/AC.10/C.3/2016/CRP.1/Add.2, paras. 21 and 22 and ST/SG/AC.10/C.3/2016/CRP.1/Add.6, para. 60)

Annex

Proposed amendments to the GHS

Section 2.17.2.1 – amend as shown below:

2.17.2.1 ~~Any explosive which is desensitized shall be considered in this class, unless~~ Any explosive while in a desensitized state shall be considered in this class unless, in that state:

(a) ~~It is manufactured with the view to producing a practical explosive or pyrotechnic effect~~ It is intended to produce a practical explosive or pyrotechnic effect;

(b) It has a mass explosion hazard according to test series 6 (a) or 6 (b) or ~~their~~the corrected burning rate according to the burning rate test described in part V, subsection 51.4 of the *United Nations Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria* is greater than 1200kg/min; or

(c) ~~Their~~The exothermic decomposition energy is less than 300J/g.

NOTE 1: *Substances or mixtures which meet the criterion (a) or (b) in their desensitized state shall be classified as explosives, see chapter 2.1. Substances or mixtures which meet the criterion (c) may fall within the scope of other physical hazard classes.*

NOTE 2: *The exothermic decomposition energy may be estimated using a suitable calorimetric technique (see section 20, sub-section 20.3.3.3 in Part II of the *United Nations Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria*).*

Ref.Doc: Annex 4 to the report of the Explosives Working Group (TGD/INF.66), as amended

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