



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 Transport of Dangerous Goods

Fifty-seventh session

Geneva, 30 November-8 December 2020

Item 16 of the agenda

Adoption of the report

Draft report

Annex

Adopted texts

Addendum

I. Draft amendments to the twenty-first revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.21) (*cont'd*)

Chapter 1.4

- 1.4.3.2.3 Delete footnotes 1 and 2. After “Convention on Physical Protection of Nuclear Material”, add “(INFCIRC/274/Rev.1, IAEA, Vienna (1980))”. After “Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities”, add “(INFCIRC/225/Rev.5, IAEA, Vienna (2011))”.

(Reference document: ST/SG/AC.10/C.3/2020/74, proposal 1, updated to reflect the current revision)

Chapter 2.9

- 2.9.3.4.3.4 (a) After (i), add a new note to read as follows:

“NOTE: In this situation, when ECx or NOEC of the tested mixture > 0.1 mg/l, there is no need to classify for long-term hazard under these Regulations.”

(Reference document: ST/SG/AC.10/C.3/2020/33, option 2)



Chapter 6.7

- 6.7.3.8.1.1 Delete footnote 4 and renumber the footnotes in 6.7 accordingly. At the end of 6.7.3.8.1.1, add a new note with the text of the footnote, to read as follows:

“NOTE: *This formula applies only to non-refrigerated liquefied gases which have critical temperatures well above the temperature at the accumulating condition. For gases which have critical temperatures near or below the temperature at the accumulating condition, the calculation of the pressure-relief device delivery capacity shall consider further thermodynamic properties of the gas (see, e.g. CGA S-1.2-2003 Pressure Relief Device Standards – Part 2 – Cargo and Portable Tanks for Compressed Gases).”*

(Reference document: ST/SG/AC.10/C.3/2020/74, proposal 6)

Chapter 7.1

- 7.1.5.3.2 (b) Delete footnote 1.

(Reference document: ST/SG/AC.10/C.3/2020/74, proposal 7)

II. Draft amendments to the 7th revised edition of the Manual of Tests and Criteria (ST/SG/AC.10/11/Rev.7) (cont’d)

General table of contents

- [13 Replace “is an unstable explosive” by “can be assigned a division”.
14 Replace “is too dangerous for transport and classified as a GHS unstable explosive” by “can be assigned a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

Section 10

- [10.1.2 Amend to read as follows:

“The GHS hazard class of explosives covers all sectors. Class 1 of the Model Regulations is a subset of this class and comprises explosives as configured for transport.

Goods of class 1 must be assigned to one of the six divisions, depending on the type of hazard they present (see Chapter 2.1, paragraph 2.1.1.4 of the Model Regulations) and to one of the thirteen compatibility groups that identify the kinds of explosives that are deemed to be compatible. The division, and occasionally the compatibility group, is also used as a basis for classification in the GHS hazard class for explosives (see Chapter 2.1, section 2.1.2, of the GHS). In addition, the GHS hazard class also comprises explosives that are not assigned a division.

Explosives that are not assigned a division are forbidden for transport.”

The existing text in 10.1.2 starting with “The general scheme for...” is transferred to a new 10.1.3 as follows:

“10.1.3 The general scheme for classifying a substance or article which is to be considered for inclusion in the class of explosives is illustrated in Figure 10.1. The assessment is in two stages. In the first stage, the potential of a substance or article to explode is ascertained and its chemical and physical stability and sensitivity are also determined. In order to promote uniform assessments by classifiers, it is recommended that, using the flow chart in Figure 10.2, data from suitable tests is analyzed systematically with respect to the appropriate test criteria. If the substance or article is provisionally accepted into the class of explosives, it is then necessary to proceed to the second stage and assign it to the correct division by use of the flow charts of figures 10.3 and 10.5. With the exception of

compatibility groups N and S, for which test data is necessary, assignment to a compatibility group, when appropriate, is usually made without reference to testing. In the case of compatibility group S, the tests may be waived (where appropriate by the competent authority) if classification by analogy is based on test results for a comparable article.”]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[10.1.3 Renumber to 10.1.4. In the first sentence, replace “as presented” by “as configured”. In the last sentence, replace “transport classifications” by “classifications in the transport configuration”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[10.1.4 Renumber to 10.1.5.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[Figure 10.1 In the box “CLASSIFY AS AN UNSTABLE EXPLOSIVE”, delete “UNSTABLE” and add a new line saying “No division assigned”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[Figure 10.2 In box 13, replace “unstable” by “too sensitive to assign a division”.

In box 16, replace “an unstable explosive” by “too sensitive to assign a division”.

In box 17, delete “unstable” and, at the end, add “No division assigned”.

In box 19, replace “ACCEPT INTO THIS CLASS” by “CLASSIFY AS AN EXPLOSIVE”.]

(Reference document: ST/SG/AC.10/C.3/2020/60 and informal document INF.38, § 14)

[Figure 10.4 In box 6, delete “an unstable” and, at the end, add “No division assigned”.

In box 7, delete “other than as an unstable explosive”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[10.3.1.1 Amend to read as follows:

“The acceptance procedure is used to determine whether or not a substance or article as offered for classification is a candidate for the class of explosives. This is decided by determining whether a substance is either too insensitive for inclusion in this class or is accepted as an explosive but considered too sensitive to mechanical stimuli, heat or flame to assign a division; or whether the article or packaged article are accepted as an explosive but considered too sensitive to impact or heat to assign a division.”]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[10.3.2.4 In the first sentence, replace “unstable” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[10.3.2.5 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[10.4.1.1 Amend the first two sentences to read as follows:

“Unless considered too sensitive to assign a division, explosives may be assigned one of six divisions, depending on the type of hazard they present (see paragraph 2.1.1.4 of the Model Regulations and 2.1.2 of the GHS). Assigning a division is a prerequisite for the transportation of explosives (see paragraph 10.1.2). The assignment procedure (figures 10.3 and 10.5) describes how to assign the division for explosive substances and articles. Explosives may also be declared from the outset to be in Division 1.1.”

In the next sentence, replace “assigned to” by “assigned”.

In the penultimate sentence, replace “2.1.1.2 (b) of the GHS” by “2.1.1.2.1 (b) of the GHS”.]

(Reference document: ST/SG/AC.10/C.3/2020/60 and informal document INF.38, §14)

[Figure 10.6 (a) In the row for “Box 13”, replace “unstable” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[Figure 10.6 (b) In box 13, replace “unstable” by “too sensitive to assign a division”.

In box 16, replace “an unstable explosive” by “too sensitive to assign a division”.

In box 17, delete “unstable” and, at the end, add “No division assigned”.

In box 19, replace “ACCEPT INTO THIS CLASS” by “CLASSIFY AS AN EXPLOSIVE”.]

(Reference document: ST/SG/AC.10/C.3/2020/60 and informal document INF.38, §14)

[Figure 10.7 (a) In the row for “Box 13”, replace “unstable” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[Figure 10.7 (b) In box 13, replace “unstable” by “too sensitive to assign a division”.

In box 16, replace “an unstable explosive” by “too sensitive to assign a division”.

In box 17, delete “unstable” and, at the end, add “No division assigned”.

In box 19, replace “ACCEPT INTO THIS CLASS” by “CLASSIFY AS AN EXPLOSIVE”.]

(Reference document: ST/SG/AC.10/C.3/2020/60 and informal document INF.38, §14)

Section 13

[13.1 Amend the text below the heading to read as follows and delete the note:

“This test series is used to answer the questions in boxes 12 and 13 of Figure 10.2 by determining the sensitiveness of the substance to mechanical stimuli (impact and friction), to heat and to flame. The question in box 12 is answered “no” if a “+” is obtained in test type 3(c) and the substance is considered too sensitive to assign a division. The question in box 13 is answered “yes” if a “+” is obtained in any of the test types 3(a), 3(b) or 3(d). If a “+” is obtained, the substance is considered too sensitive to assign a division in the form in which it was tested but may be encapsulated or otherwise desensitized or packaged to reduce its sensitiveness to external stimuli.”]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.4.1.1 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.4.1.4.1 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.4.1.4.2 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.2.1 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.2.4 In the paragraph after the indents, in the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.3.1 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.3.4.1 In the paragraph after the indents, in the first and last sentences, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.3.4.2 In the paragraph after the indents, in the third and penultimate sentences, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.4.1 Replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.4.4 In the paragraph after the indents, in the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.5.1 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.5.4.2 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.5.4.3 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.6.1 Replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.6.4.1 In the paragraph after the indents, in the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.6.4.2 In the paragraph after the indents, in the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.7.1 Replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.7.5.1 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [13.4.7.5.2 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.5.1.1 Replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.5.1.4 In the paragraph after the indents, in the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.5.2.1 Replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.5.2.4 In the paragraph after the indents, in the first and last sentences, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.5.3.1 Replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.5.3.4 In the paragraph after the indents, in the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.5.4.1 Replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.5.4.5 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.6.1.3.1 Replace “too thermally unstable for transport and shall be categorized as an unstable explosive” by “considered too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.6.1.4.2 Replace “shall be categorised as an unstable explosive and is not permitted for transport” by “and therefore too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.6.2.4.2 Replace “shall be categorised as an unstable explosive and is not permitted for transport” by “and therefore too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[13.7.1.3 In the paragraph after the indents, in the second sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

Section 14

[14.1.1 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[14.4.1.1 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

[14.4.1.4 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [14.5.1.4 In the first paragraph, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

- [14.5.2.4 In the first sentence, replace “an unstable explosive” by “too sensitive to assign a division”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)

Section 34

34.4.1.2.6 and 34.4.3.2.3 At the end, insert a new note to read as follows:

“NOTE: *In the case of a substance coated to reduce or suppress its oxidizing properties with a significant content (> 10 % by mass) of particles less than 500 µm, two sets of tests should be conducted: tests conducted with the substance as presented and tests conducted with particles less than 500 µm that were obtained from sieving the substance as presented. The substance should not be ground before sieving or testing. The final classification should be based on the test results with the most stringent classification.”*

(Reference document: ST/SG/AC.10/C.3/2020/30)

Section 51

- [51.2.1 In footnote 1, amend the first sentence to read: “Explosives of GHS Chapter 2.1 that are considered too sensitive to assign a division can also be stabilized by desensitization and consequently may be classified as desensitized explosive, provided all criteria of GHS Chapter 2.17 are met.”.]

(Reference document: ST/SG/AC.10/C.3/2020/60)
