



## 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

### Report of the Sub-Committee of Experts on the Transport of Dangerous Goods on its fifty-seventh session

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#### Addendum

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<sup>1</sup> For practical reasons, this annex has been published as an addendum with the symbol ST/SG/AC.10/C.3/114/Add.1.



## **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)**

### **Chapter 1.2**

- 1.2.1 In the definition of “Recycled plastics material”, at the end of the Note, add the following new sentence: *“These guidelines have been developed based on the experience of the manufacturing of drums and jerricans from recycled plastics material and as such may need to be adapted for other types of packagings, IBCs and large packagings made of recycled plastics material.”.*

*(Reference document: informal document INF.47, proposal 6, as amended)*

- 1.2.1 Add a new definition to read as follows:

*“IAEA Regulations for the Safe Transport of Radioactive Material”* means one of the editions of those Regulations, as follows:

- (a) For the 1985, 1985 (as amended 1990) editions: IAEA Safety Series No. 6
- (b) For the 1996 edition: IAEA Safety Series No. ST-1
- (c) For the 1996 (revised) edition: IAEA Safety Series No. TS-R-1 (ST-1, Revised)
- (d) For the 1996 (as amended 2003), 2005, 2009 editions: IAEA Safety Standards Series No. TS-R-1
- (e) For the 2012 edition: IAEA Safety Standards Series No. SSR-6
- (f) For the 2018 edition: IAEA Safety Standards Series No. SSR-6 (Rev.1).”

*(Reference document: ST/SG/AC.10/C.3/2020/1)*

### **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 1.5**

- 1.5.1.1 Amend the second sentence to read “These Regulations are based on the 2018 edition of the IAEA Regulations for the Safe Transport of Radioactive Material”.

*(Reference document: ST/SG/AC.10/C.3/2020/1)*

### **Chapter 2.4**

- 2.4.2.3.2.3 In the last sentence, after “The formulations” add “not listed in this provision but”.

*(Reference document: ST/SG/AC.10/C.3/2020/6)*

- 2.4.2.3.2.3 In the table, add the following new entry in proper order:

(7-Methoxy-5-methyl-benzothiophen-2-yl) boronic acid	88-100	OP7			3230	(11)
--	--------	-----	--	--	------	------

Under the table, add the following new table note:

“(11) The technical compound with the specified concentration limits may contain up to 12 % water and up to 1 % organic impurities.”

(Reference document: ST/SG/AC.10/C.3/2020/12)

## Chapter 2.5

2.5.3.2.4 In the last sentence, after “The formulations” add “not listed in this provision but”.

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

2.5.3.2.4 In the table, add the following new entries in proper order:

tert-BUTYLPEROXY ISOPROPYLCARBONATE	≤ 62	≥ 38		OP7			3105
tert-HEXYL PEROXYPIVALATE	≤ 52 as a stable dispersion in water			OP8	+15	+20	3117

(Reference document: ST/SG/AC.10/C.3/2020/14)

## Chapter 2.6

In Note 2 under the title of the Chapter, at the end, add “or UN 3462”.

(Reference document: ST/SG/AC.10/C.3/2020/31)

## Chapter 2.7

2.7.2.3.1.4 Delete and add “2.7.2.3.1.4 Deleted.”.

(Reference document: informal document INF.30)

2.7.2.3.1.5 Delete and add “2.7.2.3.1.5 Deleted.”.

(Reference document: informal document INF.30)

2.7.2.3.4 Amend to read “Low dispersible radioactive material”.

(Reference document: informal document INF.30)

2.7.2.3.4.1 (c) In the first sentence, replace “2.7.2.3.1.4” by “2.7.2.3.4.3”.

(Reference document: informal document INF.30)

2.7.2.3.4.3 Insert a new paragraph 2.7.2.3.4.3 to read as follows:

“2.7.2.3.4.3 A solid material sample representing the entire contents of the package shall be immersed for 7 days in water at ambient temperature. The volume of water to be used in the test shall be sufficient to ensure that at the end of the 7-day test period the free volume of the unabsorbed and unreacted water remaining shall be at least 10 % of the volume of the solid test sample itself. The water shall have an initial pH of 6-8 and a maximum conductivity of 1 mS/m at 20 °C. The total activity of the free volume of water shall be measured following the 7-day immersion of the test sample.”

Renumber current paragraph 2.7.2.3.4.3 to 2.7.2.3.4.4 and replace “2.7.2.3.4.1 and 2.7.2.3.4.2” by “2.7.2.3.4.1, 2.7.2.3.4.2 and 2.7.2.3.4.3”.

(Reference document: informal document INF.30 and § 703 of the 2018 edition of the IAEA Regulations for the Safe Transport of Radioactive Material)

## 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 EC<sub>x</sub> 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)

2.9.4 (g) Amend the beginning of the sentence to read “Except for button cells installed in equipment (including circuit boards), manufacturers...”.

(Reference document: ST/SG/AC.10/C.3/2020/77, as amended)

## Chapter 3.2, dangerous goods list

For UN 1002, in column (6), add “397”.

(Reference document: ST/SG/AC.10/C.3/2020/9)

For UN 1012, in column (6), add “398”.

(Reference document: ST/SG/AC.10/C.3/2020/69)

Delete the two entries for UN 1169.

(Reference document: ST/SG/AC.10/C.3/2020/38/Rev.1)

For UN 1197, amend column (2) to read “EXTRACTS, LIQUID, for flavour or aroma”.

(Reference document: ST/SG/AC.10/C.3/2020/38/Rev.1, as amended)

For UN 1891, in column (3), replace “6.1” by “3”. In column (4), add “6.1”. In column (7a), replace “100 ml” by “1 L”. In column (7b), replace “E4” by “E2”.

(Reference document: ST/SG/AC.10/C.3/2020/72)

For UN 3208, Packing group II, in column (7b), replace “E0” by “E2”.

(Reference document: ST/SG/AC.10/C.3/2020/32)

For UN 3209, Packing group II, in column (7b), replace “E2” by “E0”.

(Reference document: ST/SG/AC.10/C.3/2020/78, paragraph 5)

Add the following new entry:

3550	COBALT DIHYDROXIDE POWDER, containing not less than 10 % respirable particles	6.1		I		0	E5	P002 IBC07	B1, B20	T6	TP33
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(Reference document: informal document INF.45, as amended)

## Chapter 3.3

SP 225 After (a), insert the following new note:

**“NOTE:** This entry applies to portable fire extinguishers, even if some components that are necessary for their proper functioning (e.g. hoses and nozzles) are temporarily detached, as long as the safety of the pressurized extinguishing agent containers is not compromised and the fire extinguishers continue to be identified as a portable fire extinguisher.”

(Reference document: ST/SG/AC.10/C.3/2020/10/Rev.1, as amended)

SP 397 Add the following new special provision:

“397 Mixtures of nitrogen and oxygen containing not less than 19.5 % and not more than 23.5 % oxygen by volume may be transported under this entry when no other oxidizing gases are present. A Division 5.1 subsidiary hazard label is not required for any concentrations within this limit.”

(Reference document: ST/SG/AC.10/C.3/2020/9)

SP 398 Add the following new special provision:

“398 This entry applies to mixtures of butylenes, 1-butylene, cis-2-butylene and trans-2-butylene. For isobutylene, see UN 1055.”

(Reference document: ST/SG/AC.10/C.3/2020/69)

## Alphabetical index

Amend the entry for “EXTRACTS, AROMATIC, LIQUID” to read as follows:

Extracts, aromatic, liquid	3	See 1197
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(Reference document: ST/SG/AC.10/C.3/2020/38/Rev.1, as amended)

Amend the entry for “EXTRACTS, FLAVOURING, LIQUID” to read as follows:

Extracts, flavouring, liquid	3	See 1197
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(Reference document: ST/SG/AC.10/C.3/2020/38/Rev.1, as amended)

Add the following new entries in alphabetical order:

1-butylene	2.1	See 1012
cis-2-butylene	2.1	See 1012
COBALT DIHYDROXIDE POWDER, containing not less than 10 % respirable particles	6.1	3550
EXTRACTS, LIQUID, for flavour or aroma	3	1197
trans-2-butylene	2.1	See 1012

(Reference document: ST/SG/AC.10/C.3/2020/69, informal document INF.45, as amended, and ST/SG/AC.10/C.3/2020/38/Rev.1, as amended)

## Chapter 4.1

4.1.1.19.2 Delete the second sentence. In the fourth sentence, replace “1 000” by “3 000”.

(Reference document: ST/SG/AC.10/C.3/2020/18, proposal 3)

4.1.3.3 Add a new last sentence to read as follows:

“Where packagings which need not meet the requirements of 4.1.1.3 (e.g., crates, pallets, etc.) are authorized in a packing instruction or the special provisions named in the dangerous goods list, these packages are not subject to the mass or volume limits generally applicable to packagings conforming to the requirements of Chapter 6.1, unless otherwise indicated in the relevant packing instruction or special provision.”

(Reference document: ST/SG/AC.10/C.3/2020/75, as amended)

4.1.4.1, P003 Under special packing provision PP32, add a new Note to read as follows:

“**NOTE:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P004 (2) Under the first paragraph, add a new Note to read as follows:

“**NOTE 1:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P004 (3) At the end, add a new Note to read as follows:

**“NOTE 2:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P005 In the second row after the heading row, under the second paragraph, add a new Note to read as follows:

**“NOTE:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P006 (2) At the end, add a new Note to read as follows:

**“NOTE:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P130 Under special packing provision PP67, add a new Note to read as follows:

**“NOTE:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P144 Under special packing provision PP77, add a new Note to read as follows:

**“NOTE:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P200 (5) In special packing provision “z”, at the end, add the following:

“Mixtures of fluorine and nitrogen with a fluorine concentration below 35 % by volume may be filled in pressure receptacles up to a maximum allowable working pressure for which the partial pressure of fluorine does not exceed 31 bar (abs.).

$$\text{working pressure (bar)} < \frac{31}{x_f} - 1$$

in which  $x_f$  = fluorine concentration in % by volume/100.

Mixtures of fluorine and inert gases with a fluorine concentration below 35 % by volume may be filled in pressure receptacles up to a maximum allowable working pressure for which the partial pressure of fluorine does not exceed 31 bar (abs.), additionally taking the coefficient of nitrogen equivalency in accordance with ISO 10156:2017 into account when calculating the partial pressure.

$$\text{working pressure (bar)} < \frac{31}{x_f} (x_f + K_k \times x_k) - 1$$

in which  $x_f$  = fluorine concentration in % by volume/100;

$K_k$  = coefficient of equivalency of an inert gas relative to nitrogen (coefficient of nitrogen equivalency);

$x_k$  = inert gas concentration in % by volume/100.

However, the working pressure for mixtures of fluorine and inert gases shall not exceed 200 bar. The minimum test pressure of pressure receptacles for mixtures of fluorine and inert gases equals 1.5 times the working pressure or 200 bar, with the greater value to be applied.”

(Reference document: ST/SG/AC.10/C.3/2020/19/Rev.1)

4.1.4.1, P200 In table 2:

- For UN 1008, replace “387” by “864” in column “LC<sub>50</sub> ml/m<sup>3</sup>”.
- For UN 2196, replace “160” by “218” in column “LC<sub>50</sub> ml/m<sup>3</sup>”, insert “X” in columns “Tubes”, “Pressure drums” and “MEGCs”, and delete “, k” in column “Special packing provisions”.
- For UN 2198, replace “190” by “261” in column “LC<sub>50</sub> ml/m<sup>3</sup>”, insert “X” in columns “Tubes”, “Pressure drums” and “MEGCs”, and delete “k” in column “Special packing provisions” (twice).

(Reference document: ST/SG/AC.10/C.3/2020/8 as amended and informal document INF.41)

4.1.4.1, P200 In table 3, for UN 1052, replace “966” by “1307” in column “LC<sub>50</sub> in ml/m<sup>3</sup>”.

(Reference document: ST/SG/AC.10/C.3/2020/8)

4.1.4.1, P205 (5), (6) and (7) Replace ISO “16111:2008” by “ISO 16111:2008 or ISO 16111:2018”.

(Reference document: informal document INF.57, proposal 5)

4.1.4.1, P205 (7) At the end, add the following new sentence: “See 6.2.2.4 to determine which standard is applicable at the time of periodic inspection and test.”.

(Reference document: informal document INF.57, proposal 5)

4.1.4.1, P208 (1)(a) Replace “ISO 11513:2011 or ISO 9809-1:2010” by “ISO 11513:2011, ISO 11513:2019, ISO 9809-1:2010 or ISO 9809-1:2019”.

(Reference document: informal document INF.57, proposal 7)

4.1.4.1, P208 (11) Replace “Annex A of ISO 11513:2011” by “Annex A of ISO 11513:2011 (applicable until 31 December 2024) or Annex A of ISO 11513:2019”.

(Reference document: informal document INF.57, proposal 7)

4.1.4.1, P408 (2) At the end, add a new Note to read as follows:

**“NOTE:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P621 (1) For “Drums”, amend the text in parentheses to read “(1A1, 1A2, 1B1, 1B2, 1N1, 1N2, 1H1, 1H2, 1D, 1G)”. For “Jerricans”, amend the text in parentheses to read “(3A1, 3A2, 3B1, 3B2, 3H1, 3H2)”.

(Reference document: ST/SG/AC.10/C.3/2020/24/Rev.1)

4.1.4.1, P801 (1) After the first sentence, add a new Note to read as follows:

**“NOTE 1:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P801 (2) After the first sentence, add a new Note to read as follows:

**“NOTE 2:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P903 At the end, after (5), add a new Note to read as follows:

**“NOTE:** The packagings authorized in (2), (4) and (5) may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P905 In the second row after the heading row, after the first sentence, add a new Note to read as follows:

**“NOTE:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P906 (2) Under sub-paragraph (b), add a new Note to read as follows:

**“NOTE 1:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

Under the last paragraph, before the additional provisions, add a new Note to read as follows:

**“NOTE 2:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P907 At the end, add a new Note to read as follows:

**“NOTE:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P909 (3) At the end, add a new Note to read as follows:

**“NOTE 1:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P909 (4) At the end, add a new Note to read as follows:

**“NOTE 2:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P910 (3) At the end, add a new Note to read as follows:

**“NOTE:** The packagings authorized may exceed a net mass of 400 kg (see 4.1.3.3).”

(Reference document: ST/SG/AC.10/C.3/2020/75)

4.1.4.1, P911 In note <sup>a</sup>, at the end, add a new indent to read as follows:

“(i) In the case of multiple batteries and multiple items of equipment containing batteries, additional requirements such as the maximum number of batteries and items of equipment, the total maximum energy content of the batteries, and the configuration inside the package, including separations and protections of the parts, shall be considered.”

(Reference document: informal document INF.12, proposal 2)

4.1.4.2, IBC07 Add the following new special packing provision:

**“B20** UN 3550 may be transported in flexible IBCs (13H3 or 13H4) with siftproof liners to prevent any egress of dust during transport.”

(Reference document: informal document INF.45, as amended)

4.1.4.2, IBC520 In the second sentence (third row), after “The formulations” add “not listed in 2.4.2.3.2.3 and 2.5.3.2.4 but”.

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

4.1.4.3, LP906 Amend the third sentence to read “For batteries and items of equipment containing batteries:”.

In (2), amend the second paragraph to read as follows:

“A verification report shall be made available on request. As a minimum requirement, the name of the batteries, their type as defined in Section 38.3.2.3 of the Manual of Tests and Criteria, the maximum number of batteries, the total mass of batteries, the total energy content of the batteries, the large packaging identification and the test data according to the verification method as specified by the competent authority shall be listed in the verification report. A set of specific instructions describing the way to use the package shall also be part of the verification report.”

Add a fourth indent to read as follows:

“(4) The specific instructions for use of the package shall be made available by the packaging manufacturers and subsequent distributors to the consignor. They shall include at least the identification of the batteries and items of equipment that may be contained inside the packaging, the maximum number of batteries contained in the package and the maximum total of the batteries energy content, as well as the configuration inside the package, including the separations and protections used during the performance verification test.”

In note <sup>a</sup>, at the end, add a new indent to read as follows:



“(i) In the case of multiple batteries and multiple items of equipment containing batteries, additional requirements such as the maximum number of batteries and items of equipment, the total maximum energy content of the batteries, and the configuration inside the package, including separations and protections of the parts, shall be considered.”

(Reference document: informal document INF.12, proposal 1, as amended)

4.1.6.1.8 In the penultimate paragraph, first sentence, replace “ISO 11117:1998 or ISO 11117:2008 + Cor 1:2009” by “ISO 11117:1998, ISO 11117:2008 + Cor 1:2009 or ISO 11117:2019”.

In the final sentence, replace “ISO 16111:2008” by “ISO 16111:2008 or ISO 16111:2018”.

(Reference document: informal document INF.57, proposals 5 and 9)

4.1.9.1.4 In the first sentence, delete “, tanks, intermediate bulk containers”.

(Reference document: informal document INF.57)

## Chapter 4.2

4.2.5.2.6, T23 In the paragraph under the heading row, last sentence, after “The formulations” add “not listed in 2.4.2.3.2.3 and 2.5.3.2.4 but”.

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

## Chapter 5.2

5.2.1.9.2 Remove the double asterisk in figure 5.2.5 and remove the note for the double asterisk below the figure.

At the end, add a new note to read as follows:

**“NOTE:** The mark shown in Figure 5.2.5 in 5.2.1.9 of the twenty-first revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations, may continue to be applied until 31 December 2026.”

(Reference document: ST/SG/AC.10/C.3/2020/76)

## Chapter 5.4

5.4.1.4.3 After (c), add the following new indent:

“(d) Molten substances: When a substance, which is solid in accordance with the definition in 1.2.1, is offered for transport in the molten state, the qualifying word “MOLTEN” shall be added as part of the proper shipping name, unless it is already part of the proper shipping name (see 3.1.2.5);”

Renumber existing indent (d) to (e).

At the end, add the following new indent:

“(f) Stabilized and temperature controlled substances: Unless already part of the proper shipping name the word “STABILIZED” shall be added to the proper shipping name if stabilization is used and the words “TEMPERATURE CONTROLLED” shall be added to the proper shipping name if stabilization is by temperature control or a combination of chemical stabilization and temperature control (see 3.1.2.6).”

(Reference document: ST/SG/AC.10/C.3/2020/15)

5.4.1.5.3 Amend the paragraph below the heading to read as follows:

“For dangerous goods transported in salvage packagings in accordance with 4.1.1.18, including large salvage packagings, larger size packagings or large packagings of appropriate type and performance level to be used as a salvage packaging, the words “**SALVAGE PACKAGING**” shall be included.

For dangerous goods transported in salvage pressure receptacles in accordance with 4.1.1.19, the words “**SALVAGE PRESSURE RECEPTACLE**” shall be included.”

(Reference document: ST/SG/AC.10/C.3/2020/27)

5.4.1.5.4 Replace “If the word “STABILIZED” is part of” by “If the words “TEMPERATURE CONTROLLED” are part of” and delete “when stabilization is by means of temperature control.”.

(Reference document: ST/SG/AC.10/C.3/2020/15)

5.4.1.5.12 Amend to read as follows:

“5.4.1.5.12 *Additional entries in the case of the application of special provisions*

Where, in accordance with a special provision in Chapter 3.3, additional information is necessary, this additional information shall be included in the dangerous goods transport document.”

(Reference document: ST/SG/AC.10/C.3/2020/11/Rev.1, option 1)

## Chapter 6.1

6.1.1.2 In the second sentence, replace “successfully to withstand the tests” by “to successfully fulfil the requirements”.

(Reference document: ST/SG/AC.10/C.3/2020/28/Rev.1)

6.1.1.4 In the Note, replace “ISO 16106:2006” by “ISO 16106:2020” and delete “Packaging –” in the standard’s title.

(Reference document: ST/SG/AC.10/C.3/2020/50)

## Chapter 6.2

6.2.2.1.1 In the table, for “ISO 9809-1:2010”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 9809-1:2010”, add the following new entry:

ISO 9809-1:2019	Gas cylinders — Design, construction and testing of refillable seamless steel gas cylinders and tubes — Part 1: Quenched and tempered steel cylinders and tubes with tensile strength less than 1 100 MPa	Until further notice
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In the table, for “ISO 9809-2:2010”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 9809-2:2010”, add the following new entry:

ISO 9809-2:2019	Gas cylinders – Design, construction and testing of refillable seamless steel gas cylinders and tubes – Part 2: Quenched and tempered steel cylinders and tubes with tensile strength greater than or equal to 1 100 MPa	Until further notice
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In the table, for “ISO 9809-3:2010”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 9809-3:2010”, add the following new entry:

ISO 9809-3:2019	Gas cylinders — Design, construction and testing of refillable seamless steel gas cylinders and tubes — Part 3: Normalized steel cylinders and tubes	Until further notice
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(Reference document: informal document INF.57, proposals 1, 2 and 3)

6.2.2.1.2 At the end of the table, add the following new entries:

ISO 9809-1:2019	Gas cylinders — Design, construction and testing of refillable seamless steel gas cylinders and tubes — Part 1: Quenched and tempered steel cylinders and tubes with tensile strength less than 1 100 MPa	Until further notice
ISO 9809-2:2019	Gas cylinders – Design, construction and testing of refillable seamless steel gas cylinders and tubes – Part 2: Quenched and tempered steel cylinders and tubes with tensile strength greater than or equal to 1 100 MPa	Until further notice
ISO 9809-3:2019	Gas cylinders — Design, construction and testing of refillable seamless steel gas cylinders and tubes — Part 3: Normalized steel cylinders and tubes	Until further notice

(Reference document: informal document INF.57, proposals 1, 2 and 3)

6.2.2.1.3 In the first table, for “ISO 9809-1:2010”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 9809-1:2010”, add the following new entry:

ISO 9809-1:2019	Gas cylinders — Design, construction and testing of refillable seamless steel gas cylinders and tubes — Part 1: Quenched and tempered steel cylinders and tubes with tensile strength less than 1 100 MPa	Until further notice
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In the first table, for “ISO 9809-3:2010”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 9809-3:2010”, add the following new entry:

ISO 9809-3:2019	Gas cylinders — Design, construction and testing of refillable seamless steel gas cylinders and tubes — Part 3: Normalized steel cylinders and tubes	Until further notice
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(Reference document: informal document INF.57, proposals 1 and 3)

6.2.2.1.4 In the table, for “ISO 21029-1:2004”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 21029-1:2004”, add the following new entry:

ISO 21029-1:2018 + Amd.1:2019	Cryogenic vessels – Transportable vacuum insulated vessels of not more than 1 000 litres volume – Part 1: Design, fabrication, inspection and tests	Until further notice
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(Reference document: informal document INF.57, proposal 4)

6.2.2.1.5 In the table, for “ISO 16111:2008”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 16111:2008”, add the following new entry:

ISO 16111:2018	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride	Until further notice
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(Reference document: informal document INF.57, proposal 5)

6.2.2.1.6 In the table, for “ISO 10961:2010”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 10961:2010”, add the following new entry:

ISO 10961:2019	Gas cylinders – Cylinder bundles – Design, manufacture, testing and inspection	Until further notice
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(Reference document: informal document INF.57, proposal 6)

- 6.2.2.1.7 In the table, for “ISO 9809-1:2010”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 9809-1:2010”, add the following new entry:

ISO 9809-1:2019	Gas cylinders — Design, construction and testing of refillable seamless steel gas cylinders and tubes — Part 1: Quenched and tempered steel cylinders and tubes with tensile strength less than 1 100 MPa	Until further notice
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In the table, for “ISO 11513:2011”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 11513:2011”, add the following new entry:

ISO 11513:2019	Gas cylinders – Refillable welded steel cylinders containing materials for sub-atmospheric gas packaging (excluding acetylene) – Design, construction, testing, use and periodic inspection	Until further notice
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(Reference document: informal document INF.57, proposals 1 and 7)

- 6.2.2.3 In the first table, for “ISO 11117:2008 + Cor.1:2009”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 11117:2008 + Cor.1:2009”, add the following new entry:

ISO 11117:2019	Gas cylinders – Valve protection caps and guards – Design, construction and tests	Until further notice
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In the first table, for “ISO 17871:2015”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. In the column “Title”, Add the following new note under the title:

**“NOTE:** *This standard shall not be used for flammable gases.*”

After the entry for “17871:2015”, add the following new entry:

ISO 17871:2020	Gas cylinders – Quick-release cylinder valves – Specification and type testing.	Until further notice
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In the second table, for “ISO 16111:2008”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the entry for “ISO 16111:2008”, add the following new entry:

ISO 16111:2018	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride	Until further notice
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(Reference document: informal document INF.57, proposals 9 and 10 and consequential amendment)

- 6.2.2.4 In the first table, for “ISO 11513:2011”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2024”. After the entry for “ISO 11513:2011”, add the following new entry:

ISO 11513:2019	Gas cylinders – Refillable welded steel cylinders containing materials for sub-atmospheric gas packaging (excluding acetylene) – Design, construction, testing, use and periodic inspection	Until further notice
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In the first table, for “ISO 10462:2013”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2024”. After the entry for “ISO 10462:2013”, add the following new entry:

ISO 10462:2013 + Amd1:2019	Gas cylinders – Acetylene cylinders – Periodic inspection and maintenance	Until further notice
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At the end of the first table, add the following new entry:

ISO 23088:2020	Gas cylinders – Periodic inspection and testing of welded steel pressure drums — Capacities up to 1 000 l	Until further notice
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In the second table, for “ISO 16111:2008”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2024”.  
After the entry for “ISO 16111:2008”, add the following new entry:

ISO 16111:2018	Transportable gas storage devices – Hydrogen absorbed in reversible metal hydride	Until further notice
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(Reference document: informal document INF.57, proposals 5, 7, 11 and 12)

6.2.4 Below the heading, add a new paragraph to read as follows:

“6.2.4.1 The internal pressure of aerosol dispensers at 50 °C shall not exceed 1.2 MPa (12 bar) when using flammable liquefied gases, 1.32 MPa (13.2 bar) when using non-flammable liquefied gases, and 1.5 MPa (15 bar) when using non-flammable compressed or dissolved gases. In case of a mixture of several gases, the stricter limit shall apply.”

The existing paragraph below the title becomes 6.2.4.2.

Renumber the following subparagraphs as follows: 6.2.4.1 to 6.2.4.2.1, 6.2.4.1.1 to 6.2.4.2.1.1, 6.2.4.1.2 to 6.2.4.2.1.2, 6.2.4.2 to 6.2.4.2.2, 6.2.4.2.1 to 6.2.4.2.2.1, 6.2.4.2.2 to 6.2.4.2.2.2, 6.2.4.2.2.1 to 6.2.4.2.2.2.1, 6.2.4.2.2.2 to 6.2.4.2.2.2.2, 6.2.4.2.3 to 6.2.4.2.2.3, 6.2.4.2.3.1 to 6.2.4.2.2.3.1, 6.2.4.2.3.2 to 6.2.4.2.2.3.2 and 6.2.4.3 to 6.2.4.2.3.

In the renumbered 6.2.4.2, replace “6.2.4.2.2” by “6.2.4.2.2.2” and “6.2.4.2.3” by “6.2.4.2.2.3”.

In the renumbered 6.2.4.2.2, replace “6.2.4.1” by “6.2.4.2.1” and “6.2.4.2” by “6.2.4.2.2”.

In the renumbered 6.2.4.2.3, replace “6.2.4.1” by “6.2.4.2.1” and “6.2.4.2” by “6.2.4.2.2”.

(Reference document: ST/SG/AC.10/C.3/2020/43, as amended)

## Chapter 6.3

6.3.2.1 In the second sentence, replace “successfully to withstand the tests” by “to successfully fulfil the requirements”.

(Reference document: ST/SG/AC.10/C.3/2020/28/Rev.1)

6.3.2.2 In the Note, replace “ISO 16106:2006” by “ISO 16106:2020” and delete “Packaging –” in the standard’s title.

(Reference document: ST/SG/AC.10/C.3/2020/50)

## Chapter 6.4

6.4.12.1 In the first sentence, delete “2.7.2.3.1.3, 2.7.2.3.1.4,” and after “2.7.2.3.4.2”, insert “, 2.7.2.3.4.3”.

(Reference document: informal document INF.30)

6.4.12.2 Delete “2.7.2.3.1.3, 2.7.2.3.1.4,” and after “2.7.2.3.4.2”, insert “, 2.7.2.3.4.3”.

(Reference document: informal document INF.30)

6.4.24.1 Amend the heading above 6.4.24.1 to read “Packages not requiring competent authority approval of design under the 1985, 1985 (as amended 1990), 1996, 1996 (revised), 1996 (as amended 2003), 2005, 2009 and 2012 editions of the IAEA Regulations for the Safe Transport of Radioactive Material”.

(Reference document: ST/SG/AC.10/C.3/2020/1)

- 6.4.24.1 (a) Amend to read “Packages that meet the requirements of the 1985 or 1985 (as amended 1990) editions of the IAEA Regulations for the Safe Transport of Radioactive Material:”.

*(Reference document: ST/SG/AC.10/C.3/2020/1)*

- 6.4.24.1 (b) Amend to read “Packages that meet the requirements of the 1996, 1996 (revised), 1996 (as amended 2003), 2005, 2009 or 2012 editions of the IAEA Regulations for the Safe Transport of Radioactive Material:”.

*(Reference document: ST/SG/AC.10/C.3/2020/1)*

- 6.4.24.2 Amend the heading above 6.4.24.2 to read “Packages designs approved under the 1985, 1985 (as amended 1990), 1996, 1996 (revised), 1996 (as amended 2003), 2005, 2009 and 2012 editions of the IAEA Regulations for the Safe Transport of Radioactive Material”.

*(Reference document: ST/SG/AC.10/C.3/2020/1)*

- 6.4.24.2 (a) Amend to read “Packagings that were manufactured to a package design approved by the competent authority under the provisions of the 1985 or 1985 (as amended 1990) editions of the IAEA Regulations for the Safe Transport of Radioactive Material may continue to be used provided that all of the following conditions are met:”.

*(Reference document: ST/SG/AC.10/C.3/2020/1)*

- 6.4.24.2 (b) Amend to read “Packagings that were manufactured to a package design approved by the competent authority under the provisions of the 1996, 1996 (revised), 1996 (as amended 2003), 2005, 2009 or 2012 editions of the IAEA Regulations for the Safe Transport of Radioactive Material may continue to be used provided that all of the following conditions are met:”.

*(Reference document: ST/SG/AC.10/C.3/2020/1)*

- 6.4.24.3 Replace “Editions of IAEA Safety Series No. 6” by “editions of the IAEA Regulations for the Safe Transport of Radioactive Material”.

*(Reference document: ST/SG/AC.10/C.3/2020/1)*

- 6.4.24.4 Amend to read “No new manufacture of packagings of a package design meeting the provisions of the 1996, 1996 (revised), 1996 (as amended 2003), 2005, 2009 or 2012 editions of the IAEA Regulations for the Safe Transport of Radioactive Material shall be permitted to commence after 31 December 2028.”.

*(Reference document: ST/SG/AC.10/C.3/2020/1)*

- 6.4.24.5 In the heading above 6.4.24.5, replace “(2009 Edition of IAEA Safety Standard Series No.TS-R-1)” by “(2009 edition of the IAEA Regulations for the Safe Transport of Radioactive Material”.

In the paragraph, replace “or (iii) of the 2009 Edition of IAEA Regulations” by “or (iii) of the 2009 edition of the IAEA Regulations”.

*(Reference document: ST/SG/AC.10/C.3/2020/1 and informal document INF.24)*

- 6.4.24.6 Amend the heading above 6.4.24.6 to read “Special form radioactive material approved under the 1985, 1985 (as amended 1990), 1996, 1996 (revised), 1996 (as amended 2003), 2005, 2009 and 2012 editions of the IAEA Regulations for the Safe Transport of Radioactive Material”.

Amend the paragraph to read as follows:

“Special form radioactive material manufactured to a design which had received unilateral approval by the competent authority under the 1985, 1985 (as amended 1990), 1996, 1996 (revised), 1996 (as amended 2003), 2005, 2009 and 2012 editions of the IAEA Regulations for the Safe Transport of Radioactive Material may continue to be used when in compliance with the mandatory management system in accordance with the applicable requirements of

1.5.3.1. There shall be no new manufacture of special form radioactive material to a design that had received unilateral approval by the competent authority under the 1985 or 1985 (as amended 1990) editions of the IAEA Regulations for the Safe Transport of Radioactive Material. No new manufacture of special form radioactive material to a design that had received unilateral approval by the competent authority under the 1996, 1996 (revised), 1996 (as amended 2003), 2005, 2009 and 2012 editions of the IAEA Regulations for the Safe Transport of Radioactive Material shall be permitted to commence.”

(Reference document: ST/SG/AC.10/C.3/2020/1 as amended by informal document INF.24)

## Chapter 6.5

6.5.2.1.2 Add a new 6.5.2.1.2 to read as follows:

“6.5.2.1.2 IBCs manufactured from recycled plastics material as defined in 1.2.1 shall be marked “REC”. For rigid IBCs this mark shall be placed near the marks prescribed in 6.5.2.1.1. For the inner receptacle of composite IBCs, this mark shall be placed near the marks prescribed in 6.5.2.2.4.”

Renumber current 6.5.2.1.2 and 6.5.2.1.3 as 6.5.2.1.3 and 6.5.2.1.4 respectively.

(Reference document: informal document INF.47, proposal 1, as amended)

6.5.4.1 In the Note, replace “ISO 16106:2006” by “ISO 16106:2020” and delete “Packaging –” in the standard’s title.

(Reference document: ST/SG/AC.10/C.3/2020/50)

## Chapter 6.6

6.6.1.2 In the Note, replace “ISO 16106:2006” by “ISO 16106:2020” and delete “Packaging –” in the standard’s title.

(Reference document: ST/SG/AC.10/C.3/2020/50)

6.6.1.3 In the second sentence, replace “successfully to withstand the tests” by “to successfully fulfil the requirements”.

(Reference document: ST/SG/AC.10/C.3/2020/28/Rev.1)

## 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 (a) Replace “the word “STABILIZED”” by “the words “TEMPERATURE CONTROLLED””.

(Reference document: ST/SG/AC.10/C.3/2020/15, as amended)

7.1.5.3.2 (b) Delete footnote 1.

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

### **Table of correspondence between the IAEA regulations and the Model Regulations**

In the title of the “Table of correspondence between paragraph numbers in the IAEA regulations...” replace “PARAGRAPH NUMBERS” by “PARAGRAPHS, TABLES AND FIGURES” and replace “THE IAEA REGULATIONS FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIAL (2018 EDITION – SSR-6 (Rev. 1))” by “THE 2018 EDITION OF THE IAEA REGULATIONS FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIAL”. Add a heading above the first table to read “Correspondence between paragraphs”. In the header row of the first table, replace “SSR-6” by “IAEA” and “UN” by “Model Regulations”. Replace the joint heading above the second and third tables by a heading above the second table reading “Correspondence between tables” and a heading above the third table reading “Correspondence between figures”. In the header row of the second table, replace “SSR-6 Table” by “IAEA” and replace “UN Model Regulations” by “Model Regulations”. In the header row of the third table, replace “SSR-6 Figure” by “IAEA” and replace “UN Model Regulations” by “Model Regulations”.

(Reference document: informal document INF.24)

### **Document ST/SG/AC.10/C.3/2020/59, Part I was adopted with the following modifications:**

2.8.3.2 Remove the square brackets.

5.2.1.7.1 Replace “and” by “or”.

5.2.1.7.2 (a) Replace “and” by “or”.

6.2.1.4.4 The modification does not apply to the English text.

6.2.2.1.9 In the table, for “ISO 11118:2015”, in column “Applicable for manufacture”, replace “Until further notice” by “Until 31 December 2026”. After the existing entry for “ISO 11118:2015”, add the following new entry:

ISO 11118:2015 +Amd.1:2019	Gas cylinders - Non-refillable metallic gas cylinders - Specification and test methods	Until further notice
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(Reference document: informal document INF.57, proposal 8)

### **Informal document INF.38, Annex 2 was adopted.**

### **Informal document INF.43, Annexes I, II and III were adopted.**

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

### **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 to read “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 transport 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 38

- 38.3.5 Amend sub-paragraph (j) of the test summary to read as follows:

“(j) Name and title of responsible person as an indication of the validity of information provided.

(Reference document: ST/SG/AC.10/C.3/2020/77, as amended)

## **Section 41**

41.1.3 Add a new paragraph 41.1.3 to read as follows:

“41.1.3 The portable tank or MEGC being subjected to the dynamic longitudinal impact test shall be dry prior to beginning the impact testing. If the facility or witnessing agency’s ability to identify potential sources of leakage is negatively impacted by weather conditions such as snow or rain that develop during testing, the impact testing shall be terminated. Impact testing shall only resume once the portable tank or MEGC is dry, and the snow or rain have stopped.”

*(Reference document: ST/SG/AC.10/C.3/2020/5/Add.1)*

## **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)*

**Document ST/SG/AC.10/C.3/2020/59, Part II was adopted with the following modifications:**

Section 20 Remove all the square brackets.

**Informal document INF.38, Annex 3 was adopted.**

### **III. Corrections to the seventh revised edition of the Manual of Tests and Criteria (ST/SG/AC.10/11/Rev.7)**

**Section 11, 11.4.1.2.1, second sentence**

The correction does not apply to the English version.

*(Reference document: informal document INF.38, Annex 3, amendment 4)*

### **IV. Corrections to the twenty-first revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.21)**

**Chapter 6.4, 6.4.24.3**

Delete 1973, 1973 (as amended),

*(Reference document: ST/SG/AC.10/C.3/2020/1)*

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