



---

**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-fourth session**

Geneva, 26 November-4 December 2018

Item 2 (a) of the provisional agenda

**Recommendations made by the Sub-Committee on its fifty-first,  
fifty-second and fifty-third sessions and pending issues:  
review of draft amendments already adopted during the biennium**

**Consolidated list of adopted texts**

**Note by the secretariat\***

This document contains draft corrections to the twentieth revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.20) which were adopted by the Sub-Committee on its fifty-first, fifty-second and fifty-third sessions.

---

\* In accordance with the programme of work of the Sub-Committee for 2017–2018 approved by the Committee at its eighth session (see ST/SG/AC.10/C.3/100, paragraph 98 and ST/SG/AC.10/44, para. 14).

## **Corrections to the twentieth revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.20)**

### **Chapter 1.2, 1.2.1 definitions**

Not applicable to the English text.

*(Reference document: ST/SG/AC.10/C.3/106/Add.1)*

### **Chapter 1.4, 1.4.3.2.1, in the Note, last sentence**

For markings *read* marks

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

### **Chapter 2.0, 2.0.0.1**

Not applicable to the English text.

*(Reference document: ST/SG/AC.10/C.3/106/Add.1)*

### **Chapter 2.0, 2.0.5, heading**

For the existing text, *substitute*

#### **2.0.5 Classification of articles as articles containing dangerous goods, N.O.S.**

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

### **Chapter 2.0, 2.0.5.1, first sentence**

For *may be transported read* may be classified

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

### **Chapter 2.0, 2.0.5.6**

For the existing text, *substitute*

2.0.5.6 Subsidiary hazards shall be representative of the primary hazard posed by the other dangerous goods contained within the article. When only one item of dangerous goods is present in the article, the subsidiary hazard(s), if any, shall be the subsidiary hazard(s) identified in column (4) of the Dangerous Goods List. If the article contains more than one item of dangerous goods and these could react dangerously with one another during transport, each of the dangerous goods shall be enclosed separately (see 4.1.1.6).

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

### **Chapter 2.1, 2.1.3.5.5, Note 2**

For firework *read* fireworks

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 2.3, 2.3.1.3**

Not applicable to the English text.

*(Reference document: ST/SG/AC.10/C.3/106/Add.1)*

**Chapter 2.6, Note under 2.6.2.2.4.1**

*For 2.8.2.3 read 2.8.2.4*

*(Reference document: ST/SG/AC.10/C.3/106/Add.1)*

**Chapter 2.8, 2.8.3.2**

*For the grouping shall be based read the assignment shall be based*

*(Reference document: ST/SG/AC.10/C.3/104/Add.1)*

**Chapter 2.8, 2.8.4.3.5**

*For  $\frac{PGx_1}{GCL} + \frac{PGx_2}{SCL_2} + \dots + \frac{PGx_i}{SCL_i} \geq 1$*

*read  $\frac{PGx_1}{GCL} + \frac{PGx_2}{SCL_2} + \dots + \frac{PGx_i}{SCL_i} \geq 1$*

*For PGxi read PGxi*

*For SCLi read SCLi*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 3.2, Dangerous goods list, for UN Nos. 3090, 3091, 3480 and 3481, in column (6)**

*Insert P911*

*Insert LP905 LP906*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 3.2, UN Nos. 3101 to 3120, in column (6)**

*Delete 323*

*(Reference document: ST/SG/AC.10/C.3/106/Add.1)*

**Chapter 3.2, 3.2.1, Dangerous Goods List, for UN 3543, in column (2)**

*For ARTICLES CONTAINING A SUBSTANCE WHICH EMITS FLAMMABLE GAS IN CONTACT WITH WATER, N.O.S.*

*read* ARTICLES CONTAINING A SUBSTANCE WHICH IN CONTACT WITH WATER EMITS FLAMMABLE GASES, N.O.S.

(Reference document: ST/SG/AC.10/C.3/104/Add.1)

**Chapter 3.3, special provision 188 (c)**

For 9.2.4 (a) and (e) read 2.9.4 (a), (e), (f) if applicable and (g)

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 3.3, special provision 251, second paragraph**

Not applicable to the English text.

(Reference document: ST/SG/AC.10/C.3/106/Add.1)

**Chapter 3.3, special provision 301, first paragraph, last sentence**

For the existing text, *substitute*

When it is required to ensure liquid dangerous goods remain in their intended orientation, orientation arrows shall be displayed on at least two opposite vertical sides with the arrows pointing in the correct direction in accordance with 5.2.1.7.1.

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 3.3, special provision 323**

*Delete* and add Deleted.

(Reference document: ST/SG/AC.10/C.3/106/Add.1)

**Chapter 3.3, special provision 341**

Not applicable to the English text.

(Reference document: ST/SG/AC.10/C.3/106/Add.1)

**Chapter 3.3, special provision 388, in the second, third and seventh paragraphs**

*For* consigned under the entries *read* assigned to the entries

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 3.3, special provision 388, fourth paragraph**

Not applicable to the English text.

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 3.3, special provision 388, fourth paragraph**

Not applicable to English

*(Reference document: ST/SG/AC.10/C.3/106/Add.1)*

**Chapter 3.3, special provision 389, first paragraph**

For 2.9.4 (a) to (e) read 2.9.4 (a) to (g)

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 3.3, special provision 392, in the table, for ECE Regulation No. 110, in the second column**

For the existing text, *substitute*

Uniform provisions concerning the approval of:

- I. Specific components of motor vehicles using compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system
- II. Vehicles with regard to the installation of specific components of an approved type for the use of compressed natural gas (CNG) and/or liquefied natural gas (LNG) in their propulsion system

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 3.3, special provision 392 (c), second sentence**

For the existing text, *substitute*:

If only one valve exists or only one valve works, all openings with the exception of the opening of the pressure relief device shall be closed as to be gastight under normal conditions of transport;

*(Reference document: ST/SG/AC.10/C.3/104/Add.1)*

**Alphabetical index**

For ARTICLES CONTAINING A SUBSTANCE WHICH EMITS FLAMMABLE GAS IN CONTACT WITH WATER, N.O.S.

read ARTICLES CONTAINING A SUBSTANCE WHICH IN CONTACT WITH WATER EMITS FLAMMABLE GASES, N.O.S.

*(Reference document: ST/SG/AC.10/C.3/104/Add.1)*

**Chapter 4.1, packing instruction P006**

Not applicable to the English text.

*(Reference document: ST/SG/AC.10/C.3/106/Add.1)*

**Chapter 4.1, 4.1.4.1, packing instruction P200, (3) (a), (3) (b), (3) (b) (i) and (3) (d)**

*For (4) read (5)*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.1, P410, table note (d)**

For the existing text *substitute*

<sup>d</sup> *For packing group II substances, these packagings may only be used when transported in a closed cargo transport unit.*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.1, P520, PP94, 4.**

*For grammes read grams*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.1, P520, PP95, 5.**

*For grammes read grams*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.1, P907, after the heading row**

*Insert the following new row*

|                                      |
|--------------------------------------|
| This instruction applies to UN 3363. |
|--------------------------------------|

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.1, packing instruction P907, second paragraph, second sentence**

*For filling density read filling ratio*

*(Reference document: ST/SG/AC.10/C.3/104/Add.1)*

**Chapter 4.1, 4.1.4.1, P911, (1)**

*For the packaging has to read the packaging shall*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.1, P911, (1) (b)**

*For No flame will occur read No flame shall occur*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.1, P911, (1) (c)**

For No projectiles will exit *read* No projectiles shall exit

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, 4.1.4.1, P911, table note a, in (b), last sentence**

For this hazards *read* these hazards

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, 4.1.4.1, P911, table note a, in (c), at the beginning**

For mitigations effects *read* mitigating effects

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, 4.1.4.1, P911, table note a, in (e)**

For the higher possible SOC *read* the highest possible SOC

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, 4.1.4.1, P911, table note a, (h)**

For the existing text, *substitute*

(h) These scenarios shall be assessed over a period of time long enough to allow all the possible consequences to occur (e.g. 24 hours).

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, packing instruction LP03**

Not applicable to the English text.

(Reference document: ST/SG/AC.10/C.3/106/Add.1)

**Chapter 4.1, 4.1.4.3, LP903, second sentence**

For the existing text, *substitute*

The following large packagings are authorized for a single battery and for a single item of equipment containing batteries, provided that the general provisions of 4.1.1 and 4.1.3 are met:

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, 4.1.4.3, LP904, first sentence**

For the existing text, *substitute*

This instruction applies to single damaged or defective batteries and to single items of equipment containing damaged or defective cells and batteries of UN Nos. 3090, 3091, 3480 and 3481.

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.3, LP904, second sentence**

For the existing text, *substitute*

The following large packagings are authorized for a single damaged or defective battery and for a single item of equipment containing damaged or defective cells and batteries, provided the general provisions of 4.1.1 and 4.1.3 are met.

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.3, LP905, second row after the heading row**

For the existing text, *substitute*

The following large packagings are authorized for a single battery and for a single item of equipment containing cells or batteries, provided that the general provisions of 4.1.1 and 4.1.3 are met:

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, packing instruction LP905, introductory sentence**

For “cells and batteries” read “cells or batteries” (twice).

*(Reference document: ST/SG/AC.10/C.3/106/Add.1)*

**Chapter 4.1, 4.1.4.3, LP905, (2), first line**

For the existing text, *substitute*

For a single item of equipment containing cells or batteries:

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.3, LP906, first row after the heading row**

Delete single

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 4.1, 4.1.4.3, LP906, second row after the heading row, second line**

For the existing text, *substitute*

For a single battery and for a single item of equipment containing batteries:

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*



**Chapter 4.1, 4.1.4.3, LP906, (1), at the beginning**

For The large packaging has to be capable *read* The large packaging shall be capable

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, 4.1.4.3, LP906, table note a, in (b), last sentence**

For this hazards *read* these hazards

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, 4.1.4.3, LP906, table note a, in (c), at the beginning**

For mitigations effects *read* mitigating effects

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, 4.1.4.3, LP906, table note a, in (e)**

For the higher possible SOC *read* the highest possible SOC

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, 4.1.4.3, LP906, table note a, in (f), at the end**

For the packaging *read* the large packaging

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.1, 4.1.4.3, LP906, table note a, (h)**

For the existing text, *substitute*

(h) These scenarios shall be assessed over a period of time long enough to allow all the possible consequences to occur (e.g. 24 hours).

(Reference document: ST/SG/AC.10/C.3/102/Add.1)

**Chapter 4.2, 4.2.5.3, portable tank special provision TP10, second sentence**

For beyond the date of expiry of the last testing *read* beyond that date

(Reference document: ST/SG/AC.10/C.3/104/Add.1)

**Chapter 5.2, 5.2.1.7.1**

For the existing text, *substitute*

5.2.1.7.1 Except as provided in 5.2.1.7.2:

- Combination packagings having inner packagings containing liquid dangerous goods;
- Single packagings fitted with vents;

- Cryogenic receptacles intended for the transport of refrigerated liquefied gases; and
- Machinery or apparatus containing liquid dangerous goods when it is required to ensure the liquid dangerous goods remain in their intended orientation (see special provision 301 of chapter 3.3),

...

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 5.2, 5.2.2.1.13.1, at the beginning**

*For Packages containing dangerous goods in articles and dangerous goods in articles transported unpackaged read Packages containing articles or articles transported unpackaged*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 5.2, 5.2.2.2.2, table, for label model No 7A, second column**

*For Category I read Category I – WHITE*

*(Reference document: ST/SG/AC.10/C.3/104/Add.1)*

**Chapter 5.2, 5.2.2.2.2, table, for label model No 7B, second column**

*For Category II read Category II – YELLOW*

*(Reference document: ST/SG/AC.10/C.3/104/Add.1)*

**Chapter 5.2, 5.2.2.2.2, table, for label model No 7C, second column**

*For Category III read Category III – YELLOW*

*(Reference document: ST/SG/AC.10/C.3/104/Add.1)*

**Chapter 5.3, 5.3.1.1.2 (b)**

*Delete and bulk containers*

*(Reference document: ST/SG/AC.10/C.3/104/Add.1)*

**Chapter 5.3, 5.3.2.2, second paragraph, second sentence**

*Not applicable to the English text*

*(Reference document: ST/SG/AC.10/C.3/106/Add.1)*

**Chapter 5.4, 5.4.1.5.5, at the beginning**

*Delete of Division 4.1*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 6.2, 6.2.2.1.8, table, Note for ISO 21172-1:2015**

*For irrespective of section read irrespective of section*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Chapter 7.1, 7.1.5.3.5, in the table, for Portable tanks, second column**

*For < 50 °C read ≤ 45 °C*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Appendix A, table, for class 2.1, last row**

*For GAZ read GAS*

*(Reference document: ST/SG/AC.10/C.3/102/Add.1)*

**Appendix A, in the table, for Division 4.3, for UN 3543, in column “Proper shipping name”**

*For ARTICLES CONTAINING A SUBSTANCE WHICH EMITS FLAMMABLE GAS IN CONTACT WITH WATER, N.O.S.*

*read ARTICLES CONTAINING A SUBSTANCE WHICH IN CONTACT WITH WATER EMITS FLAMMABLE GASES, N.O.S.*

*(Reference document: ST/SG/AC.10/C.3/104/Add.1)*

**Appendix B, Glossary of terms, for “Initiation, means of”**

*For significant hazard read significant risk*

*(Reference document: ST/SG/AC.10/C.3/104/Add.1)*

---